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**A survey of attitudes to depression in the general public: a comparison
of age and gender differences.**

& Research Portfolio

Volume One

(Volume Two Bound Separately)

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Submitted in partial fulfilment of the requirements for the degree of

Doctorate in Clinical Psychology

December 2004

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Table of Contents

Volume One (this bound volume)

	Pages
Chapter One: Small Scale Service Related Project	1-25
An Audit of a “Physical Health Clinic” within an Adult Clinical Psychology Department	
Chapter Two: Major Research Project Systematic Review	26-85
An examination of the lay publics’ attitudes towards depression: a systematic review.	
Chapter Three: Major Research Project Proposal	86-105
A survey of attitudes to depression in the general public: a comparison of age and gender differences.	
Chapter Four: Major Research Project Paper	106-131
A survey of attitudes to depression in the general public: a comparison of age and gender differences.	
Chapter Five: Single Case Research Study (Abstract only)	132-134
A parenting intervention to reduce challenging behaviours in a seven-year-old boy with learning disabilities and autistic features.	
Chapter Six: Appendices	135-167
Appendix 1 – Small Scale Service Related Project	
Appendix 2 – Major Research Project Systematic Review	
Appendix 3 – Major Research Project Proposal	
Appendix 4 – Major Research Project Paper	

	Pages
Chapter Five: Single Case Research Study	1-28
A parenting intervention to reduce challenging behaviours in a seven-year-old boy with learning disabilities and autistic features.	
 Appendix: Single Case Research Study	 29-31
Guidelines for the submission to <i>Behavior Modification</i>	

Chapter One: Small Scale Service Related Project

An Audit of a “Physical Health Clinic” within an Adult Clinical Psychology Department.

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Division of Community Based Sciences

Prepared in accordance with the guidelines for the submission to the

Scottish Medical Journal

(See Appendix 1.1)

Submitted in partial fulfilment of the requirements for the degree of Doctorate in Clinical Psychology

**An Audit of a “Physical Health Clinic” within an Adult Clinical
Psychology Department.**

**Running Heading: Patient characteristics in a ‘Physical Health Clinic’
within an Adult Clinical Psychology Department**

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Abstract

Background

A 'physical health clinic', for individuals with chronic pain and chronic fatigue, was established in March 1998, within the Department of Clinical Psychology, Lomond and Argyll NHS Trust, Scotland.

Aims

To examine the characteristics of patients who attended and were subsequently discharged from the 'physical health clinic', between March 1998 and March 2002. Particular interest is given to patient characteristics according to discharge status and physical health problem.

Method

Data were gathered from patient files and audit forms, entered into SPSS and analyzed with descriptive statistics and comparative analyses using Wilcoxon and McNemar tests.

Results and Conclusions

Fifty-eight patients (11 male, 47 female), with a mean age of 40 years (range 18 – 61 years) were referred to the 'physical health clinic', during the audit period. Patients were referred with a variety of physical health problems, including chronic fatigue, chronic pain and health-related anxiety. Half the patients referred completed treatment and the rest of the patients either cancelled, never attended or dropped out of treatment. For patients who completed pre- and post-treatment psychometric measures, the results

demonstrate statistically significant improvement in symptoms of anxiety and depression. However, the low numbers of patients who completed psychometric measures, greatly reduces the generalizability of the findings.

Keywords: physical health clinic, chronic pain, chronic fatigue.

Introduction

Physical health problems can be considered to be multi-factorial, consisting of biological, psychological, and social components, which combined serve to predispose, precipitate and maintain the overall problem¹. Using this health psychology model, cognitive behavioural therapy has been applied to help patients with physical illness. Between 20- 25% of patients with chronic medical problems are thought to experience clinically significant psychological difficulties². Cognitive behavioural therapy (CBT) combines education, behavioural and cognitive techniques to help patients develop new coping strategies to manage their physical health difficulty more effectively and reduce psychological distress. White (2000) argues that CBT is particularly suited to addressing the problems associated with chronic medical problems³.

A recent study randomly allocated patients with chronic fatigue syndrome (CFS) to either CBT or training in relaxation techniques. Results showed that 70% of the patients who were in the CBT group had made substantial improvement in physical functioning compared with 13% in the relaxation group⁴. At five-year follow-up⁵, these treatment effects were maintained; patients in the CBT group had more 'good outcomes' than those who received relaxation techniques. Similar findings have been found for the efficacy of CBT with patients with chronic pain. In a systematic review of trials for patients with various different types of chronic pain, CBT was found to

increase activity, improve psychological functioning and in some cases, reduce pain. The authors conclude that CBT is an effective treatment for patients with chronic pain⁶.

In consultation with clinical psychology colleagues in Glasgow and surrounding areas there appears to have been no other local descriptive study of patients with physical health problems attending outpatient clinical psychology services. There is little known about the characteristics of this patient population.

In March 1999, the Department of Adult Clinical Psychology, Lomond and Argyll Primary Care NHS Trust, set up a service to provide CBT for patients with chronic pain and chronic fatigue. The catchment area for this department is within West Dunbartonshire, with a population of 48,250, containing areas of both affluence and considerable deprivation. The service established is known as the 'Physical Health Clinic' and was designed as a new way of delivering an existing service. Referrals of patients with physical health problems were previously incorporated within the general service provided by the clinical psychology department. The new structure involves one clinical psychologist with a special interest in health psychology dealing with all referrals of this nature to encourage better liaison with other professionals involved with this client group.

The aim of this study is to audit the 'physical health clinic' by describing the characteristics of the patients referred and subsequently discharged (March 1999-March 2002). Interviews conducted with the clinical psychologist running the 'physical health clinic' identified two current audit priorities. Firstly the characteristics of patients according to discharge status e.g. differences between patients who complete, drop out, cancel or never attended treatment, and secondly, characteristics of patients referred according to their physical health problem e.g. chronic pain and chronic fatigue.

Since the clinic was set up in 1999, an audit form has been completed on each patient who has been referred. This form includes the following information: demographic details (date of birth, post-code, gender, name), nature of identified problem, number of sessions, psychometric scores, and information on the type of discharge (treatment completed, dropped out of treatment, cancelled treatment or never attended).

Psychometric scores are collected at the clinical interview routinely as part of the assessment process. For those patients who complete treatment, psychometric scores are collected at the final treatment session also. The psychometric measures used in the physical health clinic include the Hospital Anxiety and Depression Scale (HADS)⁷, a fourteen item scale for depression and anxiety and the General Health Questionnaire (GHQ)⁸, a twenty eight item screening questionnaire for identifying acute psychiatric problems.

Research Questions:

1. What are the demographic characteristics of this population?
 - Is there a difference in demographics between those patients who complete treatment, cancel treatment, drop out or never attend?
 - Is there a difference in demographics between patients with chronic fatigue and chronic pain?
2. Who are the referring agents for these patients?
3. How many sessions did they receive in the physical health clinic?
4. What is the nature of their physical problems?
 - How many years after diagnosis of their physical problem are people referred?
 - Is there a difference in discharge status between patients with chronic fatigue and chronic pain?
5. What is the nature of their psychological problems, according to psychometric scores?
 - Do initial psychological scores differ in severity between patients with chronic pain and chronic fatigue?
 - Do initial psychological scores differ in severity between patients who complete treatment, cancel treatment, drop out or never attend?
 - For those patients who complete treatment, what is the difference between before and after scores for severity of psychological problems?

- For patients in different physical health groups is there a difference in improvement rates based on psychometric scores following treatment?

Method

The information from each audit form is collated in an excel database held within the department. For the purposes of this audit, the information was transferred into an SPSS database and analysed using descriptive statistics, and Wilcoxon and McNemar tests, where data indicated that non-parametric significance tests were appropriate. The results are presented in the order of the research questions.

Results

Demographic characteristics

Table I summarises demographic data for all patients and subgroups. Average age was 40 years, with those who never attended (n=12), being 1 standard deviation younger than those who completed treatment. Around 80% of patients were female, although 3 of the 8 patients with health related anxiety were male.

- Insert Table I here -

Deprivation scores, based on postal codes (DEPCAT⁹) in Tables II and III represent the socio-economic status of patients. The mode DEPCAT score for

all patients can be seen to be 4, which indicates overall neither high nor low levels of deprivation. The highest modal deprivation score (5) can be seen for patients who dropped out of treatment (n=12). Patients with health related anxiety (n=10) and pain (n=8) present the lowest modal deprivation score (2) overall.

-Insert Tables II & III here -

Discharge Status

It can be seen in Figure 1 that half the patients referred completed treatment. The other half of the patients, never attended, dropped or cancelled treatment.

- Insert Figure 1 here -

Referring Agents

In Table IV it can be seen that half of the patients were referred by general practitioners. Referrals were also received from consultant physicians, psychologists, physiotherapists and gynaecologists. For patients with chronic fatigue and patients who completed treatment, the consultant physician referred the majority of patients.

- Insert Table IV here -

Length of waiting time and number of sessions

In addition, Table IV summarises data on waiting time and number of sessions patients received. There was variability in the length of time patients had to wait for an appointment. Patients who never attended treatment had a larger (0.6 standard deviations) wait between referral and the offer of an appointment than those who completed treatment. Patients included under the subgroup, 'other physical health problems' (n=10) experienced the longest mean waiting time overall (0.6 standard deviations from mean of all patients).

Physical health problems

Figure 2 presents the nature of physical health problems experienced by the patients referred to the clinic. It can be seen that the largest grouping of patients, almost half, were patients with chronic fatigue. The other main groupings include patients with health-related anxiety, and chronic pain. There are a small percentage of patients represented in Figure 2 as 'unknown'. These were patients who never attended and it is unclear from the referral letter the precise physical health problem. The 'other' category represents patients with various health problems of low numbers: coronary heart disease (2), MS (2), irritable bowel syndrome (2), diabetes (1), Addisons disease (1), psoriasis (1), vaginismus (1).

- Insert Figure 2 here -

With the exception of patients with health anxiety, it can be seen in Table V, patients were diagnosed a mean of 7.4 (6.42) years, prior to contact with the physical health clinic. Around half of all patients completed treatment. However, half the patients in the 'other physical health problem' (n=10) subgroup never attended treatment.

- Insert Table V here -

Psychometric scores

Table VI shows initial psychometric scores on the HADS and the GHQ for patients who completed and returned the measures. The scores for patients who dropped out of treatment (n=4) were between 0.5 and 1.2 standard deviations from the mean higher than for patients who completed therapy. Patients with chronic fatigue (n=19) scored 1 standard deviation higher than the mean for patients with chronic pain, anxiety or 'other' on the HADS depression.

- Insert Table VI here-

Fifteen patients completed pre- and post-treatment HADS measures. There was a significant difference between initial 11.0 (4.0) and final 8.0 (2.8) means for HADS anxiety scores ($z = 3.0$, $df = 1$, $p < 0.01$). The difference between the means at initial contact 8.8 (5.5) and at final interview, 5.5 (3.3) for HADS depression scores were also significant ($z = 2.6$, $df = 1$, $p = 0.01$). A score of 8

or more on either scale of the HADS is considered out-with the normal range and is used as the cut off for 'psychological caseness'. On the anxiety scale 93.3% of patients had initial scores over 8 and this reduced to 46.7%, post-treatment. On the depression scale 60% had an initial score over 8 and this reduced to 40% post-treatment. Using McNemar test of association for anxiety and depression scores over 8 pre and post-treatment, $\chi^2 = 1.22$, $df=1$, $p=0.27$ ns. for anxiety and for depression, $\chi^2 = 6.67$, $df=1$, $p=0.25$ ns.

Thirteen patients completed pre- and post-treatment GHQ measures. A Wilcoxon test of the difference in means of pre-treatment 6.4(7.2) and post-treatment 4.2 (5.4) indicate no significance difference ($z = 0.6$, $df = 1$, $p = 0.5$). Using the 'GHQ scoring method' and a score of 4 to indicate 'psychological caseness', as suggested by Goldberg and Williams (1988)¹⁰, 53.9% of these patients met criteria at initial assessment and 38.5% at final assessment. Using a McNemar test of association between caseness pre and post-treatment, the results were also non-significant $\chi^2 = 0.12$, $df = 1$, $p=0.73$.

Discussion

The two key areas of interest of this audit were patient characteristics according to a) discharge status and b) physical health problem.

a) Discharge Status

The results of the study indicate that half the patients referred to the physical health clinic completed treatment. The other half of patients either: never attended, cancelled or dropped out of therapy. Between three and four times more women than men attended the clinic regardless of discharge status. Socio-economic status based on DEPCAT scores showed little difference between patients according to whether they completed treatment or not.

Those who completed treatment received an average of 9 sessions. This represents a briefer form of CBT than is typically offered in research projects that have found CBT to efficacious^{11, 12}. This difference in length of treatment sessions may reflect the differences between research and naturalistic clinical settings. In contrast to research trials, clinicians face pressures such as limited resources, low support and the pressure of referrals¹³.

The demographic results showed that patients who never attended treatment were 9 years younger on average than patients who completed treatment and waited for a longer length of time for an appointment than any other grouping. The length of wait may have had an impact on the patient's decision to attend psychology. An early assessment clinic may help to reduce the number of patients who do not attend first appointments. Several studies with other patient populations have found evidence to support the use of assessment clinics, with positive comments from clients, improvement in attendance rate, cost-efficiency and higher discharge rate after the first interview^{14, 15}.

According to initial psychometric scores, patients who dropped out of treatment scored higher on the GHQ and HADS than patients who completed treatment. It is not possible to generalise these findings due to the small number of patients' (13) who completed both measures and the even smaller number of patients who completed the measures and subsequently dropped out of treatment (4). The comparison of pre-post treatment results indicate a statistically significant reduction for some patients in symptoms of anxiety and depression and a trend for a reduction in psychiatric symptoms associated with physical illness. However, the reduction in psychological difficulties in these patients following treatment may not have been clinically significant as the results comparing pre- and post-treatment 'psychological caseness' were not significant.

b) Physical health problem

Although the service was set up seeking patients with chronic pain and chronic fatigue, referrals for other physical health problems and health-related anxiety were received. There were more than twice as many referrals for patients with chronic fatigue as with chronic pain and these patients were on average 6 years older than patients with chronic pain. In all physical health groupings, there were more females than males and the highest percentage of men was found for health-related anxiety. The main referring agent for patients with chronic fatigue syndrome was the consultant physician, while general practitioners referred the largest proportion of chronic pain and health-related anxiety patients. Other referrals were received from physiotherapy, clinical psychology, and gynaecology.

With the exception of patients with health related anxiety, there was a gap of several years between diagnosis of their physical health problem and referral for psychological help with management. While it may be useful for patients with chronic pain to have completed medical examinations, it is questionable that this accounts for the high number of years since diagnosis. Research suggests that CBT can have a role in preventing chronic pain, a cognitive behavioural prevention program for 66 patients with acute back pain at risk of chronic pain, showed significant improvements relative to a waiting list control, in pain, pain behaviours, psychological distress and fatigue¹⁶. This

suggests that patients with pain could benefit from being referred to the physical health clinic earlier

Limitations and recommendations

The generalizability of the audit is limited by the low number of patients who completed pre- and post-treatment measures and due to the unique nature of the 'physical health clinic'. For future evaluation purposes of the physical health clinic it would be important for all patients to complete pre and post treatment HADS and GDS. In addition to these tools it may be equally important to use measures of distress and disability associated with the physical health problem.

List of Tables and Figures

Table I. Demographic details, including gender and age, for patients according to their discharge status and type of physical illness.

	n	Gender				Mean Age in years (SD)
		Male		Female		
		n	%	n	%	
<i>Discharge Status*</i>						
Completed treatment	29	5	17	24	83	43.1 (9.8)
Never attended	12	3	25	9	75	34.6 (12.4)
Dropped out	12	3	25	9	75	38.6 (13.4)
Cancelled treatment	4	0	0	4	100	42.5 (12.1)
<i>Physical Health Problem</i>						
CFS	26	4	15	22	85	41.5 (10.2)
Pain	10	1	10	9	90	35.6 (10.8)
Health Anxiety	8	3	37	5	63	43.0 (9.7)
Other	10	3	30	7	70	39.0 (14.5)
<i>All patients</i>	<i>58</i>	<i>11</i>	<i>19</i>	<i>47</i>	<i>81</i>	<i>40.14 (11.5)</i>

* one patient was 'referred elsewhere' and this datum is not included.

Table II Deprivation Scores for patients according to discharge status.

DEPCAT SCORE	All patients		Completed treatment		Never attended		Dropped out		Cancelled treatment	
	n	%	n	%	n	%	n	%	n	%
1	5	9	2	7	1	8	2	17	0	0
2	11	19	6	21	3	25	0	0	1	25
3	0	0	0	0	0	0	0	0	0	0
4	24	41	14	48	4	33	4	33	2	50
5	16	28	7	24	3	25	5	42	1	25
6	2	3	0	0	1	8	1	8	0	0
7	0	0	0	0	0	0	0	0	0	0
Mode	4	-	4	-	4	-	5	-	4	-

Table III Deprivation Scores for patients according to physical health problem

DEPCAT SCORE	CFS		Pain		Health Anxiety		Other	
	n	%	n	%	n	%	n	%
1	3	11	0	0	1	12	1	10
2	2	8	5	50	3	38	1	10
3	0	0	0	0	0	0	0	0
4	11	42	3	30	2	25	6	60
5	9	35	2	20	2	25	1	10
6	1	3	0	0	0	0	1	10
7	0	0	0	0	0	0	0	0
Mode	4	-	2	-	2	-	4	-

Figure 1. Discharge status of all patients referred to the physical health clinic (n=58)

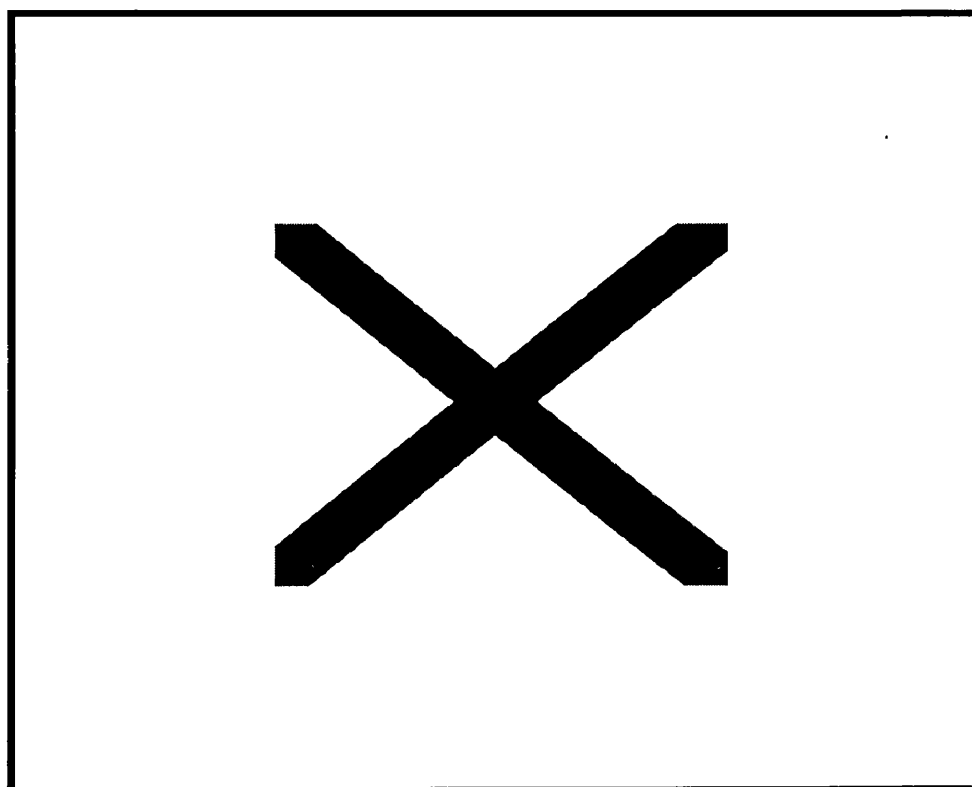


Figure 2. Pie chart showing the distribution of physical health problems among patients referred to the physical health clinic.
(n=58)

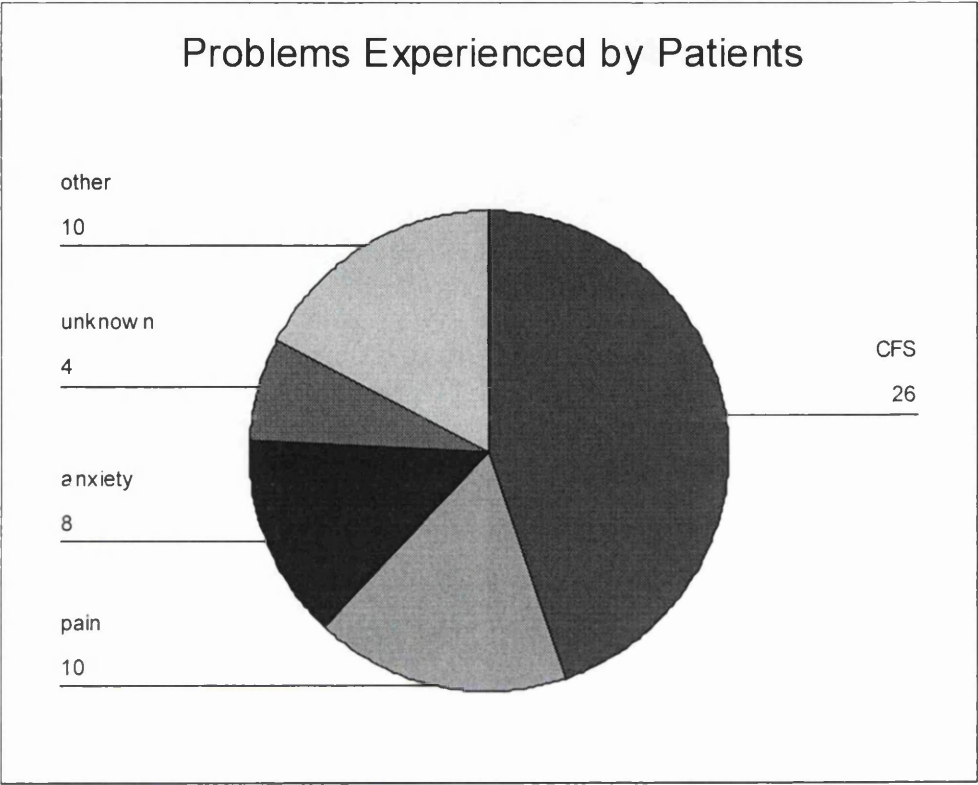


Table V. Mean years since patient received diagnosis for patients and discharge status for patients in each physical health grouping.

	<i>n</i>	Mean Years since diagnosis (SD)	Discharge Status										
			Completed treatment		Cancelled Treatment		Dropped out		Referred elsewhere		Never attended		Total %
			<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	
CFS	26	7.6 (6.8)	15	58	10	4	7	27	0	0	3	11	100
Pain	10	8.0 (4.4)	4	40	1	10	1	10	1	10	3	30	100
Anxiety	8	1.7 (0.6)	4	50	2	25	2	25	2	0	2	0	100
Other	10	6.6 (7.2)	5	50	0	0	0	0	0	0	5	50	100

Table VI. Initial HADS and GHQ-28 scores according to discharge status and physical health problem

		GHQ-28	HADS	
	<i>n</i>	0011* (SD)	Depression (SD)	Anxiety (SD)
<i>Discharge Status</i>				
Completed treatment	23	5.4 (7.0)	7.8 (5.1)	10.8 (3.9)
Dropped Out	4	13.3 (4.5)	14.2 (5.1)	12.2 (4.4)
<i>Physical Health Problem</i>				
CFS	19	8.8 (7.8)	10.4 (5.7)	11.5 (4.4)
Pain	2	2.5 (2.1)	5.0 (5.7)	8.5 (3.5)
Health Anxiety	2	1.5 (0.7)	5.5 (0.7)	11.5 (0.7)
Other	4	1.2 (1.5)	4.7 (2.4)	9.7 (2.2)
<i>All patients</i>	27	6.4 (7.2)	8.8 (5.5)	11.0 (3.9)

*GHQ scoring method, 0011.

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Chapter 2. Systematic Review

**An examination of the lay publics' attitudes towards depression: a
systematic review.**

Prepared in accordance for submission to *Journal of Mental Health*.

(See Appendix 2.1)

Systematic Review submitted in partial fulfilment of the requirements for
the degree of Doctorate in Clinical Psychology.

**An examination of the lay publics' attitudes towards depression: a
systematic review.**

Running Head: A review of lay public's attitudes towards depression

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Clinical Psychologist at the time that this work was carried out.

Background: There is considerable research and knowledge regarding attitudes to mental illness in general. However, there has been no previous systematic review on attitudes to depression.

Aim: To systematically review the literature on the lay public's attitudes to depression and treatment for depression, with particular interest in any factors which account for differences in attitudes.

Method: Research studies of attitudes to depression and treatment for depression were identified using computerised searches of four databases. Sixty-four papers were identified relevant to the topic and twenty five met the inclusion criteria for review. The quality of the studies was reviewed by an independent rater.

Results: Despite methodological variability among studies, the results suggested that stigmatising attitudes regarding depression are prevalent and members of the lay public prefer the lay support system to professional help. Strong negative attitudes were found regarding the use of anti-depressant medication. Some evidence was found to suggest that attitudes to depression are influenced by various factors including age, gender, educational level, ethnic background, and previous experience of help seeking for depression.

Conclusions: Future research needs to standardize measures for assessing attitudes and further educational campaigns are necessary to combat stigmatising attitudes.

Key words: attitudes, beliefs, depression, mental illness.

INTRODUCTION

It is estimated that at any given moment in time, depression affects at least one sixth of the worlds' population (Doris et al., 1999). According to the World Health Organisation (2004), depression is the leading cause of disability and in 2000 it was the fourth leading contributor to the global burden of disease. Depression is also associated with a high risk of suicide. Studies using psychological autopsy reveal that psychiatric disorder or substance abuse is present in about 90% of all suicides, with affective disorder being the most common (Conwell & Brent, 1995). Treatment for depression is therefore of paramount importance. However, it is suggested by the World Health Organisation (2004) that across the world, fewer than 25% of those affected by depression have access to effective treatments. Several reasons of explanation by WHO are put forward including: lack of resources, lack of trained providers and the social stigma associated with mental disorder.

Stigma associated with mental health problems is reported to be widespread and pervasive across time (Huxley, 1993). Bryne (1997) identifies the negative consequences of the stigma of mental illness on both the individual with a mental illness, their family, and the allocation of resources. For example, he suggests that due to stigma perceived to be associated with depression, individuals may often deny symptoms, be non-compliant with treatment or decline to attend appointments. Depressed individuals may feel a sense of failure, anticipate rejection and increase in

negative automatic thoughts due to self-stigmatisation. Therefore it can be understood that negative attitudes to mental illness may have long-reaching implications for patient care, and need to be fully understood and recognised by health care providers involved in treatment services.

There appear to be a number of factors that influence levels of stigma. Hayward & Bright (1997) in a review of stigma and mental illness report that older adults and those of a lower education level had less positive attitudes to the mentally ill, while those who have exposure to people with mental health problems had more positive attitudes. Having a greater understanding of the factors that can influence attitudes to mental illness is considered necessary to guide approaches to combating stigma. Day et al., (2001) argue that anti-stigma programs should be founded on a sound evidence base, including an understanding of aetiology.

The studies described above, however, examine attitudes to mental illness in general. Depression is the most common form of mental illness and the lay public are more likely to have experience of depression than any other mental health problem. This review systematically examines the lay public's attitudes towards depression and its treatment, with an interest in what factors are found to account for differences in attitudes. To the authors' knowledge, no previous study has specifically reviewed attitudes towards depression and its treatment.

Search Methodology

a) Databases

The following databases were searched: PsychINFO (1974-2004), MEDLINE (1985-2004), EMBASE and EBM reviews. The timeframe was 1974 to 30th September 2004.

b) Keywords

The following keywords were used:

[ATTITUDE or BELIEFS or PREFERENCES] and [DEPRESSION or MENTAL ILLNESS] and [TREATMENT]

c) Hand-search

Hand-search of references contained in two key review papers was conducted (Byrne, 1997, Hayward & Bright, 1997).

Inclusion and Exclusion Criteria

a) Inclusion Criteria

1. All research studies that focus on attitudes to depression or attitudes to psychiatric disorders including depression.
2. All research studies that examine attitudes to treatment for depression.

b) Exclusion Criteria

1. Studies that solely examine attitudes of non-public samples such as medical professionals.
2. Studies that focus solely on attitudes to mental illness in general or a mental health problem other than depression such as schizophrenia.
3. Studies where the primary concern is changing attitudes.
4. All non-research based articles including reviews, and commentaries.
5. All unpublished work and dissertation abstracts.
6. All studies not in English language.

Quality Criteria

Studies meeting inclusion criteria were assessed using a structured questionnaire appropriate to the study design. The questionnaires for cross-sectional studies were adapted from guidelines published by the Scottish Intercollegiate Guidelines Network (SIGN: see Appendix 2.2). Qualitative studies were assessed using the quality criteria for qualitative studies set by the Critical Appraisal Skills Programme (CASP) collaboration for qualitative methodologies, (Milton Keynes Primary Care Trust, 2002; Appendix 2.3). Based on the structured questionnaire, studies were then categorised as ‘meeting all or most of the criteria’, ‘meeting some of the criteria’ or ‘meeting few or none of the criteria’ according to the design of the study (see Appendix 2.4). A sample (10 of the 25) of the studies meeting inclusion criteria were rated for methodological quality by

an independent rater. If any disagreements occurred between the two reviewers, consensus was reached through discussion.

Study Design

The majority of the studies were cross-sectional population surveys (20 studies out of 25). Four studies were qualitative in design either involving focus groups (Egede 2002, Cooper-Patrick et al., 1997 & McNair et al., 2002) or individual interviews (Angermeyer et al 2001). One study included both discussion groups and a cross-sectional survey (Priest et al., 1996).

The studies meeting inclusion criteria were designed to ask slightly different questions. The aim of 10 of the studies was to examine attitudes towards depression. A further 8 studies focused specifically on attitudes to treatment for depression. Five studies were designed to investigate differences in attitudes towards depression and treatment for depression in younger and older adults, and two studies compared attitudes to depression between people of different ethnic backgrounds.

Samples

Sample sizes varied from small qualitative discussion groups (e.g. total of 22 participants over 3 groups, Chowdhury et al., 2000) to large epidemiological population surveys (e.g. 3109 in Jorm et al., 2000). The samples were all adults over 18 years of age drawn from different

populations and represented several different countries and cultures. There were several large-scale epidemiological population surveys from German and Australian samples over different years. Other countries represented by the studies include; United Kingdom, United States and India. Sample groups included medical inpatients and outpatients, psychology students, people who met “caseness” criteria for depression, those who did not meet “caseness” criteria for depression, and lay people representative of populations.

Measures of attitudes

Attitudes to depression

a) Vignettes

Many of the studies assessed attitudes to depression using a vignette depicting an individual with depression followed by questions. This was presented in nine studies by a researcher in a structured interview format and in a questionnaire format in three studies. In all studies the vignette met some form of diagnostic criteria (APA: DSM-III-R/DSM-IV or WHO: ICD-10) or was piloted among health professionals for recognition of depression prior to use.

b) Questions

The questions that followed the vignettes were usually presented in the study as an interview schedule and were often based on themes in the literature, psychological theory or in one study flowed from preliminary

qualitative research. Questions were either open-ended or respondents were asked to complete a likert scale.

c) Other measures

In other studies the following further measures of attitudes to depression included:

Chowdhury et al., (2000): The Exploratory Model Interview Catalogue (EMIC: no reference given) translated into Bengali.

Furnham & Malik (1994): Beliefs about Depression and Anti-depressive Behaviour Questionnaire (Rippere, 1980).

McKeon & Carrick (1991): Opinions about mental illness questionnaire (Cohen & Struening, 1962).

Allen et al., (1998): Attitudes to Depression Questionnaire (ADQ, MORI, 1992).

Other measures of attitudes to treatment for depression included in Rokke & Scogin (1995):

Attitudes Towards Seeking Professional help Scale (Fisher & Turner, 1970).

Adapted Credibility Questionnaire (Borkovec & Nau, 1972).

Treatment Evaluation Inventory (Kazdin, 1980).

Description of the Included Studies and their Methodological Quality

A total of sixty-four studies were identified and hand searched. Of these twenty-five, (39%) met inclusion criteria. Table 1 presents the reasons for exclusion and excluded papers are listed separately in the reference section.

Insert Table 1 about here.

Summary data were extracted from the twenty-five included papers and are reported in Tables 2, 3, 4 and 5. The studies are allocated to the appropriate table based on the research question. Each table includes information on the study design, country of study, study quality category, sample size and response rate, measures of attitudes, main findings relevant to the review and limitations of the study.

Insert Table 2 about here.

Insert Table 3 about here.

Insert Table 4 about here.

Insert Table 5 about here.

Overall quality ratings for cross-sectional studies ranged from 1a (meeting all or most of quality criteria) to 1c (meeting none or few of quality criteria). However the majority (16 out of 20) of cross-section studies were allocated 1b (meeting some of the quality criteria). Two qualitative studies were rated as 2a (meeting all or most quality criteria), a further two were rated as 2b (meeting most of the quality criteria) and one study; 2c (meeting none or few of the quality criteria).

In the following section, the findings of papers are reviewed under the headings attitudes to depression, attitudes to treatment of depression and factors found to contribute to differences in attitudes.

Attitudes to Depression

a) Beliefs about causes of depression

Beliefs about causes of depression are likely to influence attitudes to depression and several studies compared participants' beliefs about the causes of depression with other forms of mental illness. In comparison with schizophrenia, participants responding to a depressed vignette more frequently reported causal factors to be day- to- day problems, traumatic events and virus/infection rather than childhood events and genetic factors (Jorm et al., 1997b). Similarly, in a German population survey, participants frequently reported psychosocial stress factors as the cause of depression and were significantly less likely to attribute cause of depression to biological factors compared to disorders in other vignettes (Matschinger & Angermeyer, 1996). It is not clear from these studies in what way a belief in psychosocial explanations of depression would influence attitudes. However in the qualitative study by McNair et al., (2002) people who had previously experienced depression reported that they felt depression was perceived as a personal inadequacy rather than as an illness. It may be possible that a rejection of a biomedical explanation of depression in the general public may lead to particular stigmatising

beliefs about individuals who are depressed, such as a belief that people who are depressed are weak. Interestingly, Griffiths & Christensen (2004) in a commentary discussing causal beliefs of mental illness (depression and schizophrenia) and the desire for social distance, suggest that biological causal beliefs are associated with a greater desire for social distance. It may be that adopting either solely a biomedical explanation or a psycho-social understanding of depression may lead to stigmatising beliefs and actions. It may be that educational campaigns should seek to relay a more comprehensive bio-psycho-social understanding of depression to help combat stigmatising attitudes associated. Further evidence however is necessary to examine the role of causal beliefs on attitudes to people with depression and to determine if a bio-psycho-social understanding would lead to less stigmatising attitudes.

b) Negative attitudes

Results of the studies reviewed indicate that the lay public hold negative or stigmatising attitudes about depression. In a British study, members of the lay public considered people with severe depression to be hard to talk to (62.1% of sample), unpredictable (56.4%) and a smaller percentage considered them to be a danger to others (22.9%, Crisp et al., 2000). In a US study, participants reported that depression was more stigmatising than physical illnesses such as hypertension or diabetes. In addition, participants reported that they expected disclosure of depression to lead to negative consequences in gaining employment (67% of sample), in

obtaining health insurance (59%) and in friendships (24%)(Roeloffs et al., 2003).

In qualitative studies, stigma associated with depression often emerged as a main theme. Stigma was reported to dominate experiences with family members, the health care system and the ability to participate in the wider society in the study by McNair et al., (2002). Likewise in focus group discussions, African American participants reported the shame and stigma of a diagnosis of depression (Egede 2002).

In one study, participants reported that they would be concerned that if they spoke to their GP about depression, they might be viewed as unbalanced or neurotic (Priest et al., 1996). Therefore it would seem that there is a fear among the lay public that health professionals also hold stigmatising beliefs.

In contrast some studies found less negative attitudes. A higher level of social acceptance was found for people with depression than for individuals with other illnesses, such as schizophrenia in the study by Angermeyer & Matschinger (1997). Similarly, Chowdhury et al., (2000) found that the stigma associated with depression was reported to be less than with other mental illnesses such as deliberate self-harm and hysteria. In this latter study little difference was reported between the perception of stigma for depression and schizophrenia.

One study reported that the vast majority of the public expressed positive attitudes to people with depression (McKeon & Carrick, 1991). For example, in their study, 58% of respondents disagreed with the statement, “people who are of weak character are likely to suffer from depression” and 69% disagreed with the statement “people who suffer from depression are only feeling sorry for themselves”. It is not clear why participants in this study were found to have more positive attitudes than in other studies. One possibility is that the Irish population may have more positive attitudes towards people with depression than samples from different cultures such as the UK or USA. Littlewood (1998), in a commentary on cultural variation in the stigmatisation of mental illnesses, notes that in some cultures including Ireland, distinct oral and written traditions exist that place a positive value on insanity. However it is uncertain to what extent this influences publics’ attitudes towards people with mental illness. Further studies on attitudes to depression in Irish samples will be needed to determine if the Irish public have a more positive attitude towards depression than other populations.

It is therefore evident that members of the lay public both report negative attitudes about people with depression and perceive widespread stigma prevalent in society, and possibly in the health service. It is possible that a rejection of a biomedical explanation of depression may lead to the acceptance of particular negative attitudes. However when compared with other mental illnesses there is some evidence to suggest that the stigma associated with some other illnesses may be even more profound.

Although the evidence as to which other mental illnesses have a higher stigma attached is not consistent. Further research is needed to determine if members of the lay public in Ireland have more positive attitudes towards people with depression than people from other countries.

Attitudes to Treatment for Depression

a) Role of lay support

Several studies highlighted the importance of the lay-support system in the treatment of depression. A large-scale Australian epidemiological study found in comparison to health professionals, the lay public gave higher ratings for the helpfulness of a close friend for people with depression (Jorm et al., 1997). Family and friends were most frequently suggested as people who could help with depression, in an Irish study by Gavigan et al., (2000) and in a German study participants reported that they would consider turning to a confidant as the primary source of help for depression (Angermeyer & Matschinger 1999). Similarly, in telephone interviews forty five percent of participants reported that if they thought they had depression they would turn to family members (Highet et al., 2002).

Interestingly however studies which controlled for people who had previously sought help for depression, found a different perspective on the role of lay support. Depressed white and black patients in the qualitative study by Cooper-Patrick et al., (1997) reported that during a depressive episode their usual lay support system was not sufficient. Similarly in a

large-scale Australian study, participants with a history of depression and help-seeking were less likely to believe in family support and more likely to value medical interventions than those who had not previously sought help for depression (Jorm et al., 2000).

Therefore it seems that the general public have positive attitudes towards the beneficial nature of lay support for help with depression. However, those of the lay public who have previously experienced depression and sought help, appear to have less positive attitudes about the value of lay support.

b) General Practitioner

In several studies many participants did not consider the GP (or equivalent primary care provider) to be the initial source of help. Ambivalence in consulting the family doctor was recorded in the study by Priest et al., (1996); 60% of the sample thought that people with depression would be too embarrassed to consult their GP. Despite generally positive attitudes towards GP's only 24% of the sample in the study by Gavigan et al., (2000) spontaneously mentioned their GP as someone who could help. Similarly another Irish study found only 1 in 6 participants mentioned their GP as a source of help (McKeon & Carrick, 1991). It would seem likely that the GP is not mentioned by the lay public as a key source of help, due to the preference of the lay support system. It is possible that different attitudes towards GP's would have been elicited if these studies had accounted for people who had previously sought help for depression.

c) Anti-depressant medication

It would appear from the review of the literature that overall attitudes towards the use of anti-depressant medication for depression were negative. In terms of effectiveness, participants in the study by Priest et al., (1996) were the most optimistic with 46% considering anti-depressants to be effective. However participants in other studies were even less positive about their use. Only 26% of older adults and 21% of younger adults reported anti-depressants to be 'very effective' in the study by Zeitlin et al., (1997) and in another study only 29% of participants thought anti-depressants were helpful (Jorm et al., 1997).

In addition, it would appear that the lay public not only feel that anti-depressants are not effective but that they are harmful and/or addictive. In a German study, medication was found to be the least popular treatment option and 40% of the sample warned against its usage (Angermeyer & Matschinger 1996). In other studies many participants also perceived anti-depressants as harmful, range 25%-78% (Highet et al., 2000; Jorm et al., 1997; Priest et al., 1996).

Despite a slightly higher percentage of participants viewing anti-depressants as effective, 73% of older adults and 84% of younger adults reported that anti-depressants were 'very addictive' in the study by Zeitlin et al., (1997). Similarly, 78% of participants in the Priest et al., (1996) study considered anti-depressants addictive.

The consistent findings across studies on the lay public's beliefs about the use of anti-depressant medication is striking and concerning. It would seem likely that members of the lay public differ in their beliefs regarding the use of anti-depressants from GPs and other health professionals. As GPs are often a key provider of such medication, it is plausible that such strong negative beliefs about anti-depressants may prevent many people speaking to GPs about symptoms of depression. Attitudes towards the use of anti-depressant medication are possibly influenced by historical anti-depressants and recent media coverage on the suggested association between suicide and some forms of anti-depressants. It would seem that members of the lay public need further information regarding the benefits of anti-depressants so that they are more able to make an informed decision of their use.

d) Mental Health Professionals

Attitudes towards the helpfulness of mental health professionals for people with depression were mixed. German participants were found to report different attitudes towards the use of psychotherapy depending on whether they lived in the East or West of Germany. In the West of Germany, respondents clearly indicated a preference for psychotherapy in comparison to natural remedies, meditation/yoga or psychotropic drugs. However, in the East of Germany, psychotherapy was less frequently indicated as a preference and the use of natural remedies was recommended with almost the same frequency (Angermeyer & Matschinger 1996). In a later study, Angermeyer et al., (1999) (in former East Germany) found that only 1 in

10 participants suggested turning to a psychiatrist or psychotherapist in the first instance. Self-help groups were more often offered in the first place (13.5% v 10.4% psychiatrist, 9.8% psychotherapist).

American participants were directly asked in the study by Lasoski and Thelan (1987) if psychological services were helpful for depression; 78% of participants completely agreed. However, when researchers in different studies used an open-ended questioning style, psychological or similar services received a less positive response. Highet et al., (2000) found in the telephone survey of 900 Australians, the most frequently identified first choice of treatment for depression was counselling (21%), in comparison with psychologist (2%), and Psychiatrist (2%). Counselling was also found to be the most frequently recommended in the study by McKeon et al., (1991); 23% counselling, 6% psychologist, 14% psychiatry. A similar methodological difference was highlighted in a review where closed ended questions led to more positive attitudes and open-end questions elicited more negative attitudes (Brockman et al., 1979).

It is therefore apparent that there is not sufficient evidence to draw conclusions on the extent to which members of the lay public believe mental health professionals are helpful for depression. Within Germany, using the same methodology, different results were found for participants depending on whether they lived in the East or West. Due to methodological differences, other studies have found varying results which make it difficult to compare findings.

Age Differences

As in the review on attitudes towards mental illness (Hayward & Bright, 1997), age emerged as a factor found to contribute to differences in attitudes about depression both in studies that were designed to examine age differences in attitudes towards depression and those that controlled for age as a variable.

a) Age differences in attitudes towards depression

Several studies found that in comparison with younger adults, older adults had less awareness of the significance of depression and were less likely to consider depression being an issue for older adults. In an Australian study, a significant difference was found between younger adults (aged 18-24 years) and people over 65 years in the extent to which they considered depression to be a major mental health problem (65% v 35%, Highet et al., 2002). In a UK study, using a vignette-based questionnaire, participants were significantly less likely to recognise symptoms of depression as a mental illness when the protagonist in the vignette was described as an older adult in comparison to a younger adult (Davidson & Connery, 2003). In a further UK study, the authors reported that older subjects were less likely to recognize depression in others (Zeitlin et al., 1997) Finally, a study by Allen et al., (1998) found that older adults were significantly less likely to consider that they had ever been depressed than younger adults

and older participants were also significantly less likely to believe that older adults experience depression.

However, contradictory findings are evident in some of the papers reviewed. In a US study, no difference was reported in older and younger adults' ability to recognise protagonists as having psychological problems (Lasoski & Thelan, 1987). In this study, however the younger adults were 'middle aged' (35-64), whereas in all other studies younger adults range from 18 years. It is possible that having the younger cohort missing may contribute to the findings of no significant difference between younger and older adults' attitudes in this study.

Although differences in attitudes between younger and older participants in the study by Zeitlin et al., (1997) no differences were found between older and younger people who met criteria for depression admitting to being depressed (65% of older adults who met caseness for depression compared with 61% of younger people). It is not clear why there is a clear difference in findings between this study and Allen et al., (1998) as both used the same measures of depression and attitudes towards depression.

Therefore it would seem that there are some differences between younger and older attitudes towards depression, with older adults being less likely to recognise symptoms of depression. However, it is not clear from the literature if older adults are less likely to admit to having been depressed than younger adults. Further research is necessary to examine this issue.

b) Age differences in attitudes towards treatment for depression

Several studies found in comparison to younger adults, older adults held less positive attitudes about the usefulness of outpatient mental health services for treatment of depression. McKeon and Carrick (1991) found that in comparison to younger adults, older adults were significantly less likely to view depression as treatable and preferred treatment by a psychiatric hospital than outpatient psychotherapy. Other studies also found in comparison to younger adults fewer supporters of outpatient mental health services (including psychotherapy) among those over 65 years (Angermeyer & Matschinger 1996; Angermeyer et al., 1999; Lasoski & Thelan, 1987).

The UK study by Zeitlin et al., (1997) reported significant age differences in attitudes towards treatment for depression. The authors reported that older adults were less willing to seek any form of help for depression than younger adults. Significant differences were also found to exist between younger and older adults in who they would approach for help if they suffered from depression. Fifty nine percent of people under 65 years said that they would turn to a spouse, in comparison with 11% of people over 65 years. Thirty five percent of younger adults said they would approach a psychiatrist and 31% a psychologist in comparison with 12% and 9% of older adults respectively. This finding gives support to the studies mentioned above, suggesting that older adults are less positive about outpatient mental health services than younger adults.

One study found contradictory findings. Older adults were found to exhibit more positive attitudes to seeking help and rated two of the presented psychological interventions as more credible and acceptable than younger adults (Rokke & Scogin, 1995). In addition in this study, both younger and older adults rated cognitive therapy equally as positive. However in this study all respondents were provided with information about depression and read brief descriptions of the treatments before being asked to evaluate them. It is likely that this served an educational purpose and that participants may have rated interventions differently if they had not had this information. The positive attitudes elicited from older adults in this study may provide support for the need for further educational campaigns targeted at older adults about mental health services and treatments available for depression.

In terms of attitudes towards GP's it would appear that older adults have more positive attitudes regarding the role of the GP for help with depression. Stronger adherence to the family physician was noted in individuals beyond midlife in one study (Angermeyer et al., 1999). Similarly another study reported older people were more likely to see GP as most important resource (almost 50% in comparison with 10% of people 18-24 years) and in comparison with younger adults, older adults were significantly more likely to perceive support from family and friends as harmful (Highet et al., 2000).

In summary, the literature suggests that older adults are less positive about the use of outpatient mental health services in terms of seeking help for depression. However, they do appear to value the role of their GP to a greater extent than younger adults.

Gender differences

Although no study was specifically designed to examine gender differences in attitudes to depression, differences between male and females attitudes were reported in several studies. In an Indian study of attitudes to depression, Chowdhury et al., (2000) found that self-perceived stigma associated with depression was higher among female laypersons than males (female mean stigma score 20.1, male mean stigma score 11.7). In contrast, however, Roeloffs et al., (2003) found that concerns about stigma among depressed patients were no different between males and females. In a US study, Rokke and Scogin (1995) found that females reported a higher tolerance of the stigma associated with depression, suggesting that females were less likely to allow the stigma associated with depression to influence their decisions regarding help seeking. Therefore, there is not sufficient consistent evidence to conclude there are gender differences in the perception of the stigma associated with depression.

However, more consistent differences emerge in terms of attitudes to treatment for depression. Women reported a greater recognition of the need for mental health services and more confidence in mental health professionals than men (Rokke & Scogin, 1995). Women were found to

have more knowledge about key aspects of depression and its treatment (Highet et al., 2002). Women reported that they were more likely to consult the GP about depression, however men were significantly more likely than females to turn to family and friends as a source of help (Gavigan et al., 2000). Men reported that rather than seek professional help, they would be significantly more likely to go out and socialise, to have a drink or smoke pot as the first choice of treatment for depression (Highet et al., 2002). These findings suggest that women are more likely to seek professional help for depression, whereas males are more likely to utilize lay support.

Other factors found to influence attitude

a) Cultural Factors

Several studies were designed to investigate ethnic group differences in attitudes towards depression. In a UK study, Marwaha & Livingston (2002) found that older adults from Black Caribbean ethnic backgrounds in comparison with white British older adults believed that there was nothing that could be done for people with depression. Cooper-Patrick et al., (2002), in a US study, found that the stigma of depression was perceived to be greater by black depressed patients in seeking help than for white patients.

Furnham & Malik (1994) found that Asian women living in Britain significantly differed from British women in some attitudes towards depression. Asian women agreed more with statements such as 'it is usually helpful to tell a depressed woman to pull herself together' and

‘when feeling depressed, it is more helpful to talk it over with a family member than a friend’. In addition, middle-aged Asian women were found to score higher on a measure of depression, however were less likely to report that they had been depressed.

Therefore it is apparent that an individuals’ ethnical background is likely to influence their attitude to depression and seeking help for depression. Further studies may be required to examine attitudes of people from other ethnic groups living in the UK and more research is required to examine attitudes towards treatment options.

b) Personal Experience

As mentioned previously, individuals who have had personal experience of depression were found in some studies to have different attitudes to depression and treatment for depression than those who had no personal experience. Participants who had personal experience with mental illness reported a lower level of desired social distance from people with mental illness than with those who had no personal experience (Angermeyer & Matschinger, 1997).

In terms of seeking help for depression, personal experience of depression and previous help-seeking was found to be significantly associated with more positive attitudes about treatment and intentions regarding future help-seeking (Halgin et al., 1987). Personal experience of seeking help for depression also appears to influence what treatments individuals believe to

be beneficial. Jorm et al., (2000) found that people who had previously sought help for depression were less likely to believe in usefulness of lifestyle intervention and more likely to recommend medical interventions.

However, Crisp et al., (2000) found that knowing someone with a mental illness made no difference in the amount of negative attitudes held towards people with depression. Similarly the analysis of focus group discussion revealed that among the several participants who had friends or relatives with depression this experience did not appear to change their beliefs or prompt them to seek treatment if they felt depressed (Egede, 2002). It would therefore seem that knowing someone with depression is not sufficient to warrant more positive attitudes towards seeking treatment for depression, but previous experience of being depressed and seeking help personally is the key factor (as in Cooper-Patrick et al., 1997; Halgin et al., 1987; Jorm et al., 2000).

c) Education

Educational factors were mentioned in a couple of studies to be a significant factor influencing attitudes. Angermeyer et al., (1999) found highly educated interviewees to be more likely to advise turning to a psychiatrist or psychologist. Similarly, Jorm et al., (2000) found that higher educated participants were more in favour of psychological treatments in contrast to less well-educated participants. This may be that more educated participants have more information regarding psychological treatments. Alternatively, as these forms of treatment often involve

‘talking therapy’, it may be that well educated participants are more confident in their ability to articulate their difficulties in this format.

Conclusions

It is possible to draw some general conclusions from the above review of studies. The lay public hold negative attitudes about people with depression and perceive that there is a stigma associated with a diagnosis of depression. In terms of sources of help for depression, there was a consistent finding that general practitioners, although the gatekeeper to other services, were not considered a primary resource for people with depression. Participants in several studies identified the prime importance of friends and families. This may be partly due to a concern regarding the use of anti-depressant medication, with many studies reporting high percentages of participants considering them to be addictive and harmful. When methodological differences are accounted for the literature reveals that psychological and psychiatric services are not spontaneously recommended as a source of help for people with depression.

Differences in attitudes to depression and treatment for depression were identified in younger and older adults, in keeping with the review by Hayward & Bright (1997), on attitudes to mental illness. Generally older adults appear to be poorer at recognising symptoms of depression and less positive about seeking help for depression than younger adults. Some gender differences in attitudes to treatment of depression were also found, with females being more positive about seeking professional help and males preferring lay support. In addition, the authors found that there is some evidence to suggest that educational and cultural factors may also account for differences in attitudes. Further research will be necessary to

identify the origins of such differences. Mixed support was found for the role of personal experience influencing peoples' attitudes towards depression. The results indicate that personal experience of help-seeking, may be the key factor in determining more positive attitudes, rather than simply knowing someone who has experienced depression. Again further research is needed to clarify this issue.

Methodological Issues

a) Measurement of attitudes

Although the quality of the vast majority of the studies reviewed was reasonable (1b), across studies, there was a lack of consistency in the measures of attitudes to depression and treatment of depression. Although many studies used vignettes, the content of the vignettes varied and in some cases they were used as part of an interview format and in others a questionnaire. Having an interviewer present may lead some participants to respond differently for example wishing to give the desired response. Equally, some participants may have difficulties following questionnaires without an interviewer present and this may lead to a lower response rate or spoiled questionnaires. Furthermore, the studies which did not use vignette methodology used a wide variety of measures, many of which had never previously been used.

Due to the methodological variety within studies, future research should seek to adopt some form of consistency. The vignette method of accessing attitudes to depression originated in the 1950's (Star, 1957), and appears to

have been used frequently since this time. It can be adapted across cultures and is non-personal in its approach. This would seem therefore to be a viable research method for further research to build on and standardize, taking into consideration age-sensitive context effects which have been found to influence research instruments (Knauper & Schwarz, 2004).

b) Participants

Participants were often drawn from diverse samples and the context of the research is likely to have influenced responses to measures i.e. hospital in comparison with university campus, or door- step interview. In a university sample it is plausible that there would be less adults over 65 years of age, whilst in hospital settings potential biases have already been discussed.

Clinical Implications

Educational campaigns have already proved beneficial in increasing knowledge about depression. Bhugra et al., (1997) found that following such a campaign that individuals from ethnic minority backgrounds were more likely to recognise symptoms of depression and reported that they would approach their general practitioner if they were depressed. In order to be most effective, educational campaigns need to be based on the literature on attitudes. Negative attitudes towards the use of anti-depressant medication were found to be consistent in the studies reviewed. It would seem that this should be a target of future educational campaigns, in order to inform members of the public about potential benefits of the newer forms of anti-depressant medication. In addition, future educational

campaigns should be designed particularly to help older adults recognise symptoms of depression and to educate males about the benefits in seeking professional help for depression.

It is hoped that without the stigma associated with depression, more individuals would seek help earlier before symptoms progress and receive effective support from friends and family, or treatment by general practitioners and mental health professionals. With more people willing to seek help, the amount of unmet need in society would hopefully decrease, and along with the reduction in the incidence and relapse rate for depression would be a decrease in attempted and completed suicides.

Table 1. Citations identified from the electronic literature search for the systematic review

Citation Outcome	Justification for outcome	Number of citations
Kept	Met inclusion criteria	25
Rejected	Examined attitudes to general form of mental disorder.	18
	Examined attitudes of population other than lay public.	6
	Focused on changing public attitudes	4
	A non-research publication	6
	Dissertation Abstracts or unpublished.	5
Total		64

Table 2. Showing summary details on all included studies designed to examine attitudes to depression

Investigators	Design	Country	Study Quality	Sample size (response rate)	Attitudinal Measurement tool	Main Findings of Relevance to Review	Study Limitations
Angermeyer & Matschinger (1997)	11 Cross-sectional surveys over a 4 year period,	Germany	1a	Sample range 980 to 3114, lay people. (76.4% to 72.3%)	Fully structured interview including vignette with likert scale questions.	Overall, results indicated that people with mental illness are met with a great deal of rejection from the public. In comparison with other mental disorders, highest amount of social acceptance found towards people with major depression. With increased age respondents expressed desire for social distance with individuals in all vignettes depicting various forms of mental illness. Personal experience with mental illness associated with lower level of desired social distance.	
Chowdhury et al., (2000)	Cross-sectional survey	India	1c	21 lay people 17 health care providers (not reported)	Exploratory Model Interview Catalogue (EMIC)	Depression found to be more stigmatising than somatization but less than other forms of mental illness. Lessening of	Small sample numbers. Sampling procedures unclear. No demographic information provided. Limited information

							reported stigma towards mental illness (including depression) with age. Self-perceived stigma higher among female laypersons than male.	provided regarding interview.
Crisp et al., (2000)	Cross-sectional survey	UK	1a	1737 lay people (65%)	Interview with likert scale responses.	Participants held different negative opinions about 7 mental disorders. People with depression were considered hard to talk to and unpredictable by a majority of respondents. Stigmatising opinions did not seem to be associated with knowledge. The attitudes of those who knew someone with a mental illness did not differ significantly from the rest.		
Egede (2002)	Qualitative survey	USA	2b	25 British African Americans with type II diabetes. (55%)	Focus group with interview schedule.	Participants held misconceptions about etiology of depression and stigma of depression expressed as a barrier to seeking treatment. Having friends or relatives with depression did not appear to	Not clear why only 45 out of larger sample approached to be part of focus group. Focus group numbers less than optimal (one group only had 3 members).	

Jorm et al., (1997a)	Cross-sectional survey	Australia	1b	2031 lay people (85%)	Vignette followed by interview.	change beliefs about depression. Most participants recognised some form of mental disorder although only 39% could label it as depression. GP and counsellors considered most helpful. Many standard psychiatric treatments considered harmful.	Did not report how participants allocated to version of vignette and how each group was matched in terms of demographic details.
Jorm et al., (1997b)	Cross-sectional survey	Australia	1b	2031 lay people (85%)	2 different vignettes with interview using likert style questions.	Participants with depressed vignette higher response to cause factors including day-to-day problems, traumatic events, recent death, virus/infection and lower response (in comparison to other form of mental illness) to childhood events and inherited/genetic factors.	Excluded people over 75 years of age. Order of questions in interview may have produced a bias in responses and did not have option for 'don't know' responses.
Matschinger & Angermeyer (1996)	Cross-sectional survey	Germany	1b	2094 lay people (71.2%)	Fully structured interview with 3 different vignettes (including a depressed	Participants who completed the interview with the depressed vignette most frequently reported psychosocial stress factors	Did not report demographics for each subgroup receiving different vignettes and therefore unclear if age or gender

McKeon & Carrick (1991)	Cross-sectional survey	Ireland	1a	1403 lay people (100%)	Interview schedule devised on attitude to depression, including modified version of 'Opinions About Mental Illness' questionnaire	as cause of depression. . . Participants less frequently attributed cause of depression to biological factors than in other vignettes.	Interview schedule not previously used but with face validity.
McNair et al., (2002)	Qualitative Study	Australia	2b	21 public meetings (911 evaluation forms completed; 60%) 9 focus groups (69 individuals; 93%)	Interview schedule for focus groups	People felt that depression was perceived as a personal inadequacy rather than an illness. Strong sense of stigma from family members and pressure to discontinue medication. Stigma described to	All participants had previously experienced depression and sought help. Not a representative sample of this population, as chosen to be people who were not currently ill.

Roeloffs et al., (2003)	Cross-sectional survey	USA	1b	1187 depressed patients from US primary care clinics (response rate not reported)	Questionnaire with 'stigma questions' adapted from literature.	dominate health care system and wider society. Stigma associated with depression greater than for hypertension or diabetes. Stigma not associated with service use but related to perceived unmet needs. Neither gender nor age was related to stigma concerns.	Participants were all seeking treatment when approached and therefore only represent a section of larger sample.
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Table 3. Showing summary details on all included studies designed to examine attitudes to treatment for depression

Investigator	Design	Country	Study Quality	Sample size (response rate)	Attitudinal Measurement tool	Main Findings of Relevance to Review	Study Limitations
Angermeyer & Matschinger (1996)	Cross-sectional	Germany	1a	2118 (71.9%) West German lay people sample 980 (67.4%) East German lay people.	Structured interview with vignette.	Psychotherapy was preferred choice of treatment. Least popular was psychotropic medication with 40% of sample warning against it. However fewer supporters of psychotherapy among those over 65 years.	Did not include cognitive therapy as a treatment option for depression.
Angermeyer & Matschinger (1999)	Cross-sectional	Germany	1b	1564 lay people (71.2%)	Structured interview with vignette (depression or schizophrenia).	For depression, public opinion favours lay support system and family physician if former resource exhausted.	Double number of participants completed interview with protagonist with schizophrenia than with depression. Not reported how the groups were matched on demographic details.
Cooper-Patrick et al., (1997)	Qualitative	USA	2a	7 health professionals 8 depressed black patients 8 depressed white patients. (50%)	Three focus groups with interview schedule clearly specified.	Patients in both groups said that they felt there was a social stigma associated with having depression as well as treatment for it. Stigma was perceived as a particularly important barrier to getting treatment for the black participants	

Gavigan et al., (2000)	Cross-sectional	Ireland	1b	54 lay people (89%)	Interview with six case vignettes depicting varying degrees of depression.	in the study. Many patients felt that their usual support system was ineffective during a depressive episode. Despite generally positive attitudes towards GP's, only 24% of respondents spontaneously mentioned GP as someone who could help with depression. More people suggested family and friends and similar percentage suggested psychiatrist. Males were significantly more likely than females to say that they would not be prepared to consult their GP about depression and males were significantly more likely than females to look to family and friends as a source of help.	Small sample size. Did not include a measure of depression. Interview schedule unclear.
Halgin et al., (1987)	Cross-sectional	USA	1b	445 (86%) undergraduate psychology students.	Specifically devised questionnaire based on literature.	Results suggest that the combination of having previously experienced depression and sought help is significantly related to more positive beliefs attitudes and intentions regarding help seeking.	All participants' undergraduate psychology students and received extra credit toward course requirement for participation.

Highet et al., (2002)	Cross-sectional survey	Australia	1b	900 lay people (35%)	Telephone interview designed by investigators.	Recognition of depression higher among women and younger people. Majority reported preference for self-help and non-pharmacological treatments but views of anti-depressants less negative than expected.	Low response rate. Did not describe what participants were told the interview was about. Interview schedule not previously tested.
Jorm et al., (2000)	Cross-sectional Postal survey.	Australia	1c	3109 lay people (39%)	Vignette based questionnaire	People who had previously sought help for depression were less likely to believe in the helpfulness of lifestyle interventions and more likely to believe in medical interventions. Participants with a history of depression and help-seeking less likely to believe in ECT and family support.	Participants only aged 20-59 years. Measure of depression and questionnaire validity unknown.
Priest et al., (1996)	Qualitative Quantitative survey	UK	2c 1b	8 discussion groups of lay people. 2003 lay people (response rate not reported).	Interview with likert scale responses and discussion groups	Stigma associated with depression, ambivalence in consulting family doctor due to embarrassment, fear and stigma of psychiatry. High belief that anti-depressants addictive (78%)	Interview schedule not clear for both aspects of study. No consideration of relationship between researcher and participants in discussion groups. No qualitative data presented to support findings.

Table 4. Showing summary details on all included studies designed to examine age differences in attitudes to depression and/or treatment for depression

Investigator	Design	Country	Study Quality	Sample size (response rate)	Attitudinal Measurement tool	Main Finding of Relevance to Review.	Study Limitations
Allen et al., (1998)	Cross-sectional	UK	1b	160 medical inpatients (90.9%)	Attitude to Depression Questionnaire	Both older and younger patients showed attitudinal barriers to treatment. Older adults who met 'caseness' criteria for depression less likely to consider themselves as ever having been depressed than younger adults. Older adults less likely to believe older people experience depression and less likely to seek help.	Different measure of depression was used for each age group. Not all data reported.
Davidson & Connery (2003)	Cross-sectional	UK	1b	147 older adults (45%) 122 younger adults (86%).	Vignette with likert response questionnaire.	Symptoms of depression less well recognised in an older adult protagonist in a vignette than a younger adult.	Sampling methods different for each group.
Lasoski & Thelan (1987)	Cross-sectional	USA	1b	200 (82%); 50 female visitors over 65 years, 50 male medical	Mental Health Services Questionnaire	No difference in older and younger adults ability to recognise protagonists in vignettes as having severe psychological problems.	Gender confounded with patient status.

				attending GP surgery, 80 older adults attending GP surgery (response rate unknown)	Questionnaire.	depression. But older people not found to be less likely to admit having depression than younger adults. Both groups viewed anti-depressants as addictive.	group. Not all data reported.
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Table 5. Showing summary details on all included studies designed to examine ethnic/cultural differences in attitudes to depression and/or treatment for depression

Investigator	Design	Country	Study Quality	Sample size (response rate)	Attitudinal Measurement tool	Main Finding of Relevance to Review	Study Limitations
Furnham & Malik (1994)	Cross-sectional	UK	1b	152 females students or relatives of students at university (90%)	Beliefs about depression and anti-depressive behaviour questionnaire.	Middle-aged Asian women living in Britain differed from young and middle aged British and young Asian women in their beliefs about depression. Middle-aged Asian women more reluctant to report that they have been depressed, although no difference in depression scores than other groups.	All participants female and associated with university. Possible interpretation difficulties for middle-aged Asian women who spoke English less well than other groups.
Marwaha & Livingston (2002)	Qualitative	UK	2a	40 (60%); 21 White British older adults, 19 Black African-Caribbean older adults.	Semi-structured qualitative interview with vignettes.	Most did not consider the depressed protagonist to have an illness. Differences emerged between the ethnic groups being studied: Black Caribbean and White British older adults. Black Caribbean elders thought that consulting GPs was inappropriate for people	

							with depression and that nothing could help someone with these symptoms.		
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Chapter Three: Proposal for Major Research Project

**A survey of attitudes to depression in the general public:
a comparison of age and gender differences.**

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Section of Psychological Medicine

Division of Community Based Sciences

Prepared in accordance with the course guidelines for preparation of

Major Research Project Proposal

(See Appendix 3.1)

Submitted in partial fulfillment of the requirements for the degree of Doctorate in Clinical
Psychology

Major Research Project Proposal

**A survey of attitudes to depression in the general public:
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Title

A survey of attitudes to depression in medical outpatients: a comparison of age and gender differences.

Summary

There have been several large-scale epidemiological studies in the UK and Australia which have found in general that stigmatizing attitudes towards mental illness remain. The research literature suggests that attitudes to depression may differ between older and younger adults. There appears to be little published research examining the role of gender and attitudes to depression. However, there are reported differences in experiences of depression and in suicide rates between males and females. With the use of a brief questionnaire, based on tools used in similar research, this survey examines older and younger participants' responses to a depressed fictional character in a vignette. The study is particularly interested in participants' responses when the age and gender of the character in the vignette alternates. It is hypothesized that attitudes to depression will be different when the protagonist in the vignette is an older adult rather than younger and when the protagonist is described as male rather than female.

Introduction

i) Population Surveys

Surveys of the lay public's attitude towards depression were carried out in the UK before and after the 'Defeat Depression Campaign', of the Royal College of Psychiatrists and the Royal College of General Practitioners. Prior to the start of the campaign, Priest et al., (1996) in a survey of 2003 people, found that the lay public seemed to be sympathetic to those with depression but reluctant to seek help. Crisp et al., (2000) in an independent survey following the campaign argued the campaign appeared to have marginal effects on public opinion, and the stigma of mental illness remained.

In a large-scale Australian survey of 3109 participants, Jorm et al., (2000) examined the public's knowledge and beliefs about mental disorders. The recognition of a general mental disorder was relatively high however few adults could identify depression (39%). Overall, the general public's knowledge and attitude towards treatment of depression was largely negative.

ii) Age Differences

Depression is a common psychiatric problem among older adults and is associated with a high suicide risk (Conwell, 1994). Lyness et al., (1995) compared examiner-rated with self-reported symptoms of depression in

younger and older adults. They found some older adults to significantly underreport their symptoms and argue that clinicians and researchers should obtain additional information from other sources when assessing depression in older adults.

Several studies have identified differences between younger and older adults' attitudes towards depression. Zeitlin et al., (1997) found that older participants were less likely to recognize depression in others, and were less likely to seek professional help for themselves. Angermeyer and Matschinger (1996) in a study of attitudes towards psychiatric treatment in East and West Germany also reported differences in younger and older participants' attitudes. In West Germany among participants over 65 years of age there were few supporters of psychotherapy, while this was the most preferred treatment choice for those under 65 years of age. In East Germany, supporters of 'traditional values' such as achievement, duty, acceptance or materialism, were rarely found to prefer psychotherapy or alternative treatment methods, compared to those of 'modern' or 'liberal' values. Although not reported, it is possible that older adults would be more likely to support 'traditional values' and 'modern' or 'liberal' values being largely preferred by younger adults.

Pearson (2002) in review of recent research on suicide in older adults argues that if depression and suicidality are seen as normal aspects of the aging process or expected to occur with physical conditions, they may be less likely

to be seen as worthy of treatment. These attitudes may be held by some older adults with depression and could have an impact on help-seeking and treatment provision. Pearson concludes that “continued efforts are needed to change attitudes about mental illness and treatment in order to reach older adults who do not use health care services” (Pearson, 2002; 61).

Davidson and Connery (2003) in a cross-sectional survey examined attitudes to depression in younger and older adults in a sample of 269 participants. Results suggested that there are differences in attitudes towards depression, between younger and older adults. In this study, older adults were significantly less likely to recognize depression, more likely to recommend talking to a GP and using medication, than younger adults. In addition, when a character in a vignette with depression was described as 70 rather than 30, participants were significantly less likely to consider that he would benefit from talking to a mental health professional and less likely to recognize that he may be suffering from a mental illness. However there were methodological problems with this study: different sampling procedures were used for younger and older adults, the vignette based on mainly somatic elements of depression and focused on a male protagonist only.

iii) Gender Differences

Regardless of the diagnostic instruments used, all research suggests that women experience depression twice as frequently as men (Culbertson, 1997) and are more likely to receive treatment for depression than depressed males (Unutzer et al., 2000). However, it is reported that suicide rates in most countries are higher among elderly men than women (Shah & De, 1998). In U.S, Australia, New Zealand and the U.K, it has been found that suicide rates continue to increase with age among men whereas in women they increase with age until the menopause and thereafter decline. (Shah & De, 1998).

Gender differences in attitudes towards mental illness are not as extensively reported as age differences and there is no clear pattern. In some studies such as Crisp et al., (2000), the authors report similar responses between men and women in an interview on the stigmatization of mental illness. Angermeyer & Matschinger (1997) reported no significant differences in psychiatric treatment preference among males and females in West Germany. However in East Germany, women were more in favour of psychotherapy, against biological methods and more likely to recommended natural remedies in comparison with men. In other studies the authors do not report male and female responses separately and it is not known if there are any differences (Jorm et al., 1997).

Aims and Hypotheses

i) Aims

This study seeks to further examine the differences in attitudes to depression between older and younger adults by addressing the methodological problems of the pilot study. It also aims to extend the previous study (Davidson & Connery, 2003) by considering the role of gender as a factor in differing attitudes towards a depressed subject.

ii) Hypotheses

It is hypothesized that there will be differences in attitudes towards depression in older and younger adults and male and females. Specifically it is predicted that;

- 1) Older adults will be less likely to recognize depression in a character with symptoms of depression described in a vignette.
- 2) When the character is described as 70 years of age rather than 30 years, it is hypothesized that his/her complaints are less likely to be recognized as a mental health problem.
- 3) There will be differences in attitudes towards this fictional character depending on whether it is portrayed in the masculine 'David' or the feminine 'Mary'. It is possible that participants may be least likely to recognize depression when the protagonist is described as a male aged 70 years.

Plan of Investigation

i) Participants

The numbers of participants required will be determined by a power calculation. Participants will be asked to report age, gender and post code (in order to determine deprivation category score) and note whether they are the patient or visitor. No name or initials will be necessary.

ii) Recruitment

Participants will be recruited from the waiting room of a medical out-patient department in a General Medical Hospital in Glasgow. It is considered that there would be large numbers of patients waiting for appointments and that they are likely to encompass people from all deprivation categories, under and over 65 years of age and both male and female. Other non-epidemiological studies of attitudes towards depression have also recruited from medical in-patients (Allen et al., 1998) and out-patients (Rokke & Scogin, 1995; Lasoki & Thelen, 1987; Zeitlin et al., 1997). Participants will include both patients waiting for appointments and their visitors.

iii) Measures

The questionnaire will include a vignette and questions. A vignette based on the Geriatric Depression Screening Scale (GDS, Yesavage et al., 1988) will be used. Older adults at times experience various physical health problems and some psychiatric screening tools for depression are not suited to the identification of depression in this population due to the emphasis on somatic symptoms. The GDS is a measure specifically devised to de-emphasise the somatic complaints prevalent in depression. Basing the vignette on this measure should therefore address the bias in somatic elements in the vignette in the pilot study. In Version I the protagonist will be described as 30 years of age and in Version II; 70 years of age. Both versions of the vignette will be presented in the masculine (David) and feminine (Mary). For example,

Version I

“David/Mary is 30 years of age. He/She has been feeling unusually sad and empty for the last few weeks. He is lacking in energy and often feels worthless. David/Mary has a growing dissatisfaction with his/her life and is afraid that something bad is going to happen to him/her. He/She has dropped many of his/her activities and interests and prefers to stay at home rather than going out and doing new things. This has come to the attention of his/her neighbour, who is concerned that he has not seen David/Mary about as often.”

Version II

“David/Mary is 70 years of age. He/She has been feeling unusually sad and empty for the last few weeks. He is lacking in energy and often feels worthless. David/Mary has a growing dissatisfaction with his/her life and is afraid that something bad is going to happen to him/her. He/She has dropped many of his/her activities and interests and prefers to stay at home rather than going out and doing new things. This has come to the attention of his/her neighbour, who is concerned that he has not seen David/Mary about as often.”

The first four questions used in this study were also used in an interview survey by Crisp et al., (2000) and are based on themes from Hayward and Bright (1997) literature review of stigma and mental illness. In this study, questions will be presented in the form of questionnaire rather than an interview and the protagonists name precedes each statement. As in Crisp et al., (2000) participants’ responses will be recorded on a five point likert scale, noting level of agreement with the following statements.

“David/Mary should pull himself/herself together”

“David/Mary is having the kind of problems that all of us have at times”

“David/Mary would be difficult to talk to”

“David/Mary has only himself/herself to blame”

“David/Mary may be physically ill”

The following five questions used in this study are designed to access attitudes towards the recognition of depression (or a mental illness) and beliefs about beneficial interventions. Similar questions regarding views of usefulness of treatments are used by Jorm et al., (1997), Allen et al., (1998) and Angermeyer & Matchinger (2001).

“David/Mary might be suffering from a mental illness”

“David/Mary would benefit from talking to a friend”

“David/Mary would benefit from talking to his/her own doctor (i.e. his GP)”

“David/Mary would benefit from talking to a mental health professional”

“David/Mary would benefit from medication”

In addition, as in Jorm et al., (2000) participants will be asked to respond on a likert scale to the following questions: “Do you know anyone who has had similar problems to David/Mary?” and “Have you had problems similar to David/Mary?”

iv) Design and Procedure

The study is a survey of outpatients in a hospital waiting room with a vignette based questionnaire. It involves a $(2 \times 2) \times (2 \times 2)$ mixed design, where the between subjects factors are the age and gender of participant and the within subjects factors the age and gender of the protagonist in the vignette. Each

between and within subjects factor has two levels. The participants' age will be categorized as either over 65 years of age or under 65 years of age, as the primary research aim is to study attitudes between older and younger adults. The age of the protagonist will be either 30 years of age or 70 as portrayed in the vignette and the gender either male 'David' or female, 'Mary'.

Patients in the waiting room will be approached by the researcher to ask if they would complete the questionnaire. Each person approached will be asked only once and will be informed of the confidential nature of their responses. No one will be approached who appears to be under 18 years of age or particularly anxious. Participants will be asked to complete one version of the questionnaire. The versions of the questionnaire will be randomly distributed to participants ensuring an equal number of participants under and over age 65 receive each version of the vignette.

v) Settings and Equipment

Participants will be seated waiting for an appointment in a general waiting area in a medical hospital. They will be invited to complete the questionnaire and if they consent given a questionnaire, a pen and a clipboard to lean on while they write.

vi) Data Collection and Storage

Participant data will be recorded through the use of numerical identifiers placed on the questionnaires prior to completion. All data will be securely stored on computer disc and collated in an SPSS database. No personal identifiers will be used in the study.

vii) Power Calculation

The previous study (Davidson and Connery, 2003) was considered the most comparable study on which to base a power calculation to determine the required sample size. Participants mean scores (and standard deviations) on the factor 'recognition of mental health problems' was considered the main outcome measure from the pilot study to use as a basis of the calculation. It is proposed that a total sample of 514, that is 257 in each age group (over 65 years and under 65 years) would provide 80% power to detect a significant result at the 5% level for two tailed testing.

viii) Data Analysis

Chi square will be used to test for categorical data including any differences in deprivation categories. Although the items presented in the questionnaire are not new to this area of research, they have not been used with this particular vignette and in a questionnaire format. Therefore, in order to increase the

reliability of the findings, the responses to questions on the questionnaire will be firstly analysed by a Principal Components Analysis with Varimax rotation in order to identify cluster factors. These factors will then be tested for significance with a multivariate ANOVA.

Practical Applications

Attitudes to depression may influence help-seeking behaviour in any person experiencing symptoms of depression. There is substantial evidence supporting the use of psychological and pharmacological treatments for depression. Patients who experience incomplete remission from depression are more likely to attempt suicide. Pearson (2002) argues that many older males who commit suicide do not use primary care services. She contends that continued efforts are required to shift attitudes about depression in order to help this section of the population. However, it is firstly necessary to identify the attitudes of older males and in what ways they differ from younger males or females.

Timescale

Data Collection: July 2003 – December 2003

Write up: January 2004-August 2004

Ethical Approval

Ethical approval will be sought from the Greater Glasgow Health Board Research Ethics Committee meeting in March 2003.

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Chapter Four: Major Research Project

**A survey of attitudes to depression in the general public: a comparison
of age and gender differences.**

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Prepared in accordance to submission to *Journal of Mental Health*.

(See Appendix 2.1)

Submitted in partial fulfilment of the requirements for the degree of

Doctorate in Clinical Psychology

**A survey of attitudes to depression in the general public: a comparison
of age and gender differences.**

Running Head: Attitudes to depression the general public.

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Background: Previous studies have identified the presence and persistence of negative attitudes towards depression in the lay public and have identified that older adults have more negative attitudes towards depression than younger adults. There are mixed findings in differences in attitudes amongst male and females, with some indication that males have more negative attitudes than females, though some studies report no differences between males and females. This study seeks to examine attitudes towards depression in the general public with an interest in age and gender differences in attitudes.

Method: With an overall response rate of 80%, 322 medical outpatients (and visitors) completed a short vignette style questionnaire assessing attitudes to depression. Fifty four percent of the sample were female and forty one percent over 65 years of age.

Results: From the responses to the questionnaire, using factor analysis, four themes emerged; ‘familiarity with depression’, ‘recognition of depression as a mental illness’, and ‘negative attitudes about depression’. Significant differences in attitudes to depression were found among younger and older adults and males and females.

Conclusion: Future educational campaigns aimed at the general public should concentrate their efforts on older adults and male lay people, who hold the most negative attitudes towards depression.

Key words: Attitudes, Depression, Age differences, Gender differences

Attitudes to depression have been studied in several large epidemiological studies in many different countries and across different cultures (Angermeyer & Matschinger, 1996; Crisp et al., 2000; Gavigan et al., 2000; Jorm et al., 1997; Marwaha & Livingston, 2002). From attitudinal research, authors have identified the presence of negative or stigmatising attitudes towards depression. Lay participants in a UK study reported that people with depression are difficult to talk to and unpredictable (Crisp et al., 2000). In a US study participants revealed that they expected disclosure of depression to lead to difficulties in obtaining employment, health insurance and friendship due to stigmatising attitudes (Roeloffs et al., 2003). In an examination of attitudes to treatment for depression, participants reported that they would be concerned about talking to their GP about feeling depressed as the GP might think they were 'neurotic' or 'unbalanced' (Priest et al., 1996). Other studies have also indicated that stigmatising attitudes can act as barriers to individuals recognising and seeking help for depression (Hayward & Bright, 1997; Egede, 2002).

Younger and older adults have been found to hold different attitudes to depression. Often older adults are found to have more negative attitudes (Allen et al., 1998; Hayward & Bright, 1997; Highet et al., 2002). Using a vignette with a depressed protagonist, Davidson & Connery (2003) examined attitudes to depression in younger and older adults in a sample of 269 participants. In this study, compared to younger adults, older adults

were less likely to recognize depression, more likely to recommend talking to a GP and using medication. In addition, when the character in the vignette was described as 70 rather than 30, participants were less likely to consider that he would benefit from talking to a mental health professional and less likely to recognize that he may be suffering from a mental illness. However there were methodological limitations with this study: different sampling procedures were used for younger and older adults and the vignette was based on mainly somatic elements of depression and focused on a male protagonist only.

It is widely recognised that there are gender differences in the experience of depression. Women experience depression twice as frequently as men (Culbertson 1997) and are more likely to receive treatment for depression than depressed males (Unutzer et al., 2000). However, it is reported that suicide rates increase with age among men whereas in women they increase with age until the menopause and thereafter decline (Shah & De, 1998). Therefore suicide rates are higher in males than females in older adults.

Gender differences in attitudes towards mental illness are not as extensively reported as age differences and there is no clear pattern. In some studies women are found to know more about depression than men and be more likely to have positive attitudes to treatment for depression (Gavigan et al., 2000; Highet et al., 2002; Rokke & Scogin, 1995). However, in other studies the authors report similar responses between men

and women in terms of stigmatising attitudes about depression (Crisp et al., 2000) and treatment preference (Angermeyer & Matschinger, 1997). In other studies male and female responses are not reported separately and it is not known if there are any differences (e.g. Jorm et al., 1997).

Despite educational campaigns such as the UK Defeat Depression Campaign 1991-1996 (Paykel et al., 1997), stigmatising attitudes have been found to persist towards people with depression (Crisp et al., 2000). It may be helpful if future campaigns could be aimed more specifically at a target group of the population who hold the most negative or least informed attitudes about depression. This study seeks to identify if there is such a group in the population by examining differences in attitudes between younger and older adults and male and females. It aims to address the methodological limitations in the previous study (Davidson & Connery, 2003) and to extend it by including the role of gender.

Hypotheses:

It is hypothesized that there will be differences in attitudes towards depression among older and younger and male and female participants.

Specifically it is predicted that:

- 1) Older adults will be less likely to recognize depression in a character with symptoms of depression described in a vignette.
- 2) Male participants may be less likely to recognise the symptoms of depression as represented in a vignette than female participants.

- 3) When the character is described as 70 years of age rather than 30 years, it is hypothesized that his/her complaints are less likely to be recognized as a mental health problem.
- 4) It is also hypothesized that there will be differences in attitudes towards this fictional character depending on whether it is portrayed in the masculine 'David' or the feminine 'Mary'.

METHOD

Participants

The sample recruited consisted of two adult age groups, one older (over 65 years) and one younger (under 65 years). All participants were recruited through anti-coagulant clinics held in two different general medical hospitals in Glasgow. It was considered that this sample would include high numbers of patients waiting for appointments, be likely to include people from all deprivation categories, younger and older adults, male and female, and would not include people who were acutely ill. Participants included both patients waiting for appointments and their visitors. In Clinic One, potential participants were approached while they sat in the waiting area by the author (H.C) and asked if they would like to complete a questionnaire as part of a research study being conducted on behalf of the University of Glasgow. If participants expressed an interest, they were then given an information sheet that provided more details regarding the nature of the study. Participants were provided with the questionnaire,

clipboard and pen and completed the questionnaire on their own. In Clinic Two, all potential participants were given (by H.C) an information sheet and questionnaire as they checked in for their appointment and were asked if they would read the information sheet and if they consented to complete the questionnaire. Due to the larger number of participants attending Clinic Two, this different approach was necessary to ensure that a fair representation of people attending the clinic were given an opportunity to participate. However, it led to a different response rate in each clinic.

All participants were asked to provide the following demographic information: age band (18-24, 25-44, 45-54, 55-64, 65-75 or over 75 years), gender and postal code. Deprivation scores (DEPCAT) were derived from postal-codes, with scores ranging from 1 to 7 (Carstairs & Morris, 1991).

Questionnaire

The questionnaire included a vignette and twelve questions. As older adults at times experience various physical problems that can be misrepresented as somatic complaints in some measures of depression, the vignette was based on the Geriatric Depression Screening Scale (GDS, Yesavage et al., 1988). The GDS is a measure specifically devised to de-emphasise the somatic complaints prevalent in depression. Basing the vignette on this measure addresses the bias in somatic elements in the vignette in the pilot study. In version one of the questionnaire, the

protagonist is described as 30 years of age and in version two; 70 years of age. Both versions of the vignette were available in either the masculine (David) or feminine (Mary). Therefore all together there were four different variations of the questionnaire. Each participant was asked to complete only one version and variations of the questionnaire were randomly distributed among participants. For example,

“David/Mary is 30/70 years of age. He/She has been feeling unusually sad and empty for the last few weeks. He/She is lacking in energy and often feels worthless. David/Mary has a growing dissatisfaction with his/her life and is afraid that something bad is going to happen to him/her. He/She has dropped many of his/her activities and interests and prefers to stay at home rather than going out and doing new things. This has come to the attention of his/her neighbour, who is concerned that he has not seen David/Mary about as often.”

Participants were instructed to read the vignette and then rate their level of agreement with twelve statements about the protagonist on a 5-point Likert scale, ranging from "very much" to "not at all". This was then scored in reverse, from a score of five for an agreement of 'very much' to a score of one for 'not at all'. The statements in the questionnaire were based on themes from other studies (Crisp et al., 2000; Jorm et al., 1997; Hayward & Bright, 1997).

(Q1) “David/Mary should pull himself/herself together”

(Q2) “David/Mary is having the kind of problems that all of us have at times”

(Q3) “David/Mary would be difficult to talk to”

(Q4) “David/Mary has only himself/herself to blame”

(Q5) “David/Mary may be physically ill”

(Q6) “David/Mary might be suffering from a mental illness”

(Q7) “David/Mary would benefit from talking to a friend”

(Q8) “David/Mary would benefit from talking to his/her own doctor

(i.e. his GP)

(Q9) “David/Mary would benefit from talking to a mental health professional”

(Q10) “David/Mary would benefit from medication”

In addition participants were asked to respond on a likert scale to the following questions: “Do you know anyone who has had similar problems to David/Mary?” and “Have you had problems similar to David/Mary?”

Data Analysis

Data was analysed using t-test, factor analysis with maximum likelihood extraction and univariate analysis of variance where data indicated parametric tests were appropriate.

Sample Size considerations

Prior to the commencement of recruitment, the required sample size was estimated based on the previous study with similar methodology by the same authors (Davidson & Connery, 2003). Using responses to the factor, 'recognition of mental health problems' a power calculation revealed that a sample of 514 participants would be necessary to obtain 80% power to detect significant results at the 5% level for two tailed testing.

Ethical Approval

Ethical approval was obtained from the Greater Glasgow Health Board Research Ethics Committee and the West Glasgow local Research Ethics Committee.

RESULTS

Sample

132 older adults and 190 younger adults completed questionnaires (80% response rate, Clinic 1; 97%, Clinic 2; 63%). Within the older adult sample, 54% were female, 13% were visitors rather than patients and 51% were over 75 years of age. Within the younger adult sample, 54% were female, 15% visitors, 13% aged 18-30 years, 26% aged 31-45 years, and 61% aged 46-64 years. The mean deprivation score for older adults was 3.94 (sd 1.89) and for younger adults 3.99 (sd 1.83), indicating a sample that is neither particularly deprived nor affluent. The difference in

deprivation score between older and younger adults was not significant ($t = -0.228$ $df = 295$, $p = 0.82$).

Questionnaire

Scores on each item (mean and standard deviation) of the questionnaire for “David” aged 30 and 70 years, “Mary” aged 30 and 70 years, and for participants under and over 65 years are presented in Table 1.

Insert Table 1 about here

As some of the items in the questionnaire correlated with one another, factor analysis with maximum likelihood extraction and direct oblimin rotation was used to reduce the possibility of type I errors. Fabrigar et al., (1999) argue that in psychological research maximum likelihood extraction with oblique rotation (rather than principal components with varimax rotation) is the most appropriate form of factor analysis when the goal is to identify latent variables and there is no severe problems with the normality assumptions in the data i.e. skew > 2 , and Kurtosis > 7 (Fabrigar et al., 1999). Analysis of the data revealed that all individual items presented with no severe skew or kurtosis.

Results revealed four factors with eigenvalues above 1 and loadings above 4 (range 0.46- 0.81). Factor 1 (items 11 & 12) was named ‘familiarity with depression’. Factor 2 (items 6, 8, 9, & 10) was named ‘recognition of depression as a mental illness’. and factor 3 (items 1 & 4) was named

‘negative attitudes about depression’. Factor 4 loaded only one item (item 7) and was therefore removed from the factor structure and re-analysed resulting in the three factors described above. It can be noted that the three factors are very similar (nearly identical) to three of the factors identified in the previous study (Davidson & Connery, 2003).

Analysis of variance was then used on the three factor structures to determine if there were any differences between the groups; age and gender of participants and age and gender of protagonists.

Factor 1

a) Participants

For factor 1, familiarity with depression the results revealed a main effect for age of participant ($F = 25.22$, $df = 1$, $p < 0.00$), where people over 65 years reported less familiarity with depression than participants under 65 years of age. A main effect was also found for gender of participant ($F = 4.04$, $df = 1$, $p = 0.04$), where female participants reported more familiarity with depression than males. An interaction between gender and age of participants ($F = 5.71$, $df = 1$, $p = 0.02$) indicated that when participants were over 65 years of age, males were very slightly more likely to report familiarity with depression than females. However, when participants were under 65 years of age, females were more likely to report familiarity with depression. In addition an interaction was also found between participants gender and age ($F = 4.11$, $df = 1$, $p = 0.04$).

b) Protagonists

Examination of the data for this interaction indicates that when the protagonist in the vignette was portrayed as a male, participants reported more familiarity with depression when he was described as 70 rather than 30. However when the protagonist was described as female, participants reported more familiarity with depression when described as 30 rather than 70.

Factor 2

For factor 2, 'recognition of depression as a mental illness' the results indicated three significant main effects and no interactions.

a) Participants

People under 65 years were more likely to recognise depression as a mental illness than people over 65 years ($F = 4.25$, $df = 1$, $p = 0.04$). Also, in comparison to females, males were less likely to recognise depression as a mental illness ($F = 4.97$, $df = 1$, $p = 0.03$).

b) Protagonists

The age of the protagonist was found to be significant ($F = 6.67$, $df = 1$, $p = 0.01$): when the protagonist was described as 70, participants were less likely to recognise the symptoms described in the vignette as depression than when the protagonist was described as 30.

Factor 3

For factor 3, “negative attitudes about depression”, the results indicated several significant findings.

a) Participants

When participants were over 65 years of age rather than younger, they were more likely to hold negative attitudes about people with depression ($F = 15.07$, $df = 1$, $p < 0.00$). A main effect was also found for gender of participant, where males scored higher on items measuring negative attitudes about depression ($F = 6.93$, $df = 1$, $p < 0.00$).

b) Protagonists

When the protagonist was described as 70 rather than 30, participants had less negative attitudes about depression ($F = 7.10$, $df = 1$, $p < 0.00$).

A significant interaction was identified between the gender of participant and gender of protagonist ($F = 6.41$, $df = 1$, $p = 0.01$): when the protagonist was described as male, male participants were more likely to have negative attitudes about depression than female participants. However, when the protagonist in the vignette was described as female, there was no difference in male and female attitudes about depression.

Post Hoc analyses

As the number of participants obtained to complete questionnaires did not reach the number suggested by the power calculation, a post hoc power

calculation was considered necessary to determine the level of power obtained by the study. The post hoc analysis utilised means and standard deviations, obtained from each of the factors. Using the UCLA online power calculator, the results indicated that the current sample size provides 77% power to detect significant results at 5% level for two tailed testing. This is slightly lower than the traditionally accepted 80%, but in this study it was sufficient to detect significant findings.

As hypothesised the results of this survey indicated differences in attitudes to depression between older and younger adults. Participants over 65 years reported less familiarity with depression (either personal or in someone they knew), were less likely to recognise depression as a mental illness, and were more likely to hold negative or stigmatising attitudes about depression. When the protagonist in the vignette was described as an older adult (i.e. 70 years), in keeping with the results of the pilot study (Davidson & Connery, 2003), participants were less likely to recognise the symptoms described in the vignette as depression. These findings support research by Highet et al., (2002) and Allen et al., (1998) who found less recognition of depression and increased negative attitudes to depression in older adults. These results are concerning, particularly in the light of research by Lyness et al., (1995) on the under-reporting of depressive symptoms in older adults and suggest that there are many attitudinal hurdles for older adults to overcome before they can receive appropriate help.

Interestingly, however, when the protagonist (regardless of gender) was described as an older adult, participants were less likely to report negative attitudes about depression. Therefore it would appear that overall participants were less harsh in their attitudes to older adults experiencing symptoms of depression and less likely to view them as to blame or needing to pull themselves together. It is possible that in the population at large, it is considered more understandable when an older adult has

symptoms of depression, perhaps due to bereavements or physical health problems often prevalent in later life. However, this more understanding attitude does not appear to lead to greater recognition of depression as a mental illness.

Differences in attitudes towards depression were also identified depending on the gender of the participant and the gender of the character in the vignette. Overall it was found that females reported more familiarity with depression, were more likely to recognise depression as a mental illness and were less likely to hold negative or stigmatising attitudes about depression. It would seem likely that more females would report familiarity with depression given the statistics that indicate that more females experience depression than men (Culbertson, 1997).

Interestingly when males were over 65 years of age, they were found to report more familiarity with depression than females and also when the male protagonist in the vignette was described as 70 rather than 30 more familiarity with depression was noted. This would appear to suggest that older males do recognise depression in themselves or others, and that depression described in a male older adult seemed familiar to many of the participants. However, despite these findings males were less likely to recognise depression as a mental illness and more likely to hold negative attitudes about depression. It is therefore plausible to suggest that there may be many older males experiencing symptoms of depression but not recognising their difficulty as depression and possibly holding stigmatising

attitudes (such as the need to pull oneself together) which may act as a barrier to seeking effective treatment.

Limitations

It is widely recognised that there is often a higher rate of depression in people who have chronic health problems and it is possible that there would be greater familiarity with depression in this sample from a medical outpatient population. Also, the sample represented a group of the population who were willing to use health services and may possibly provide more positive attitudes to use of health services for mental health problems than the population at large. However, recruiting from this population ensured that both younger and older adults were matched in terms of deprivation category and gender. In addition, other non-epidemiological studies of attitudes towards depression have also been recruited from medical outpatients (Rokke & Scogin, 1995; Lasoki & Thelen, 1987; Zeitlin et al., 1997).

Although the sample size obtained was higher than the pilot study (Davidson and Connery, 2003) and other non-epidemiological studies (Allen et al., 1998; Lasoski & Thelan 1987; Rokke & Scogin 1995; Zeitlin et al., 1997), it did not reach the initial target set by the power calculation of 514. Interim analysis was carried out when the sample size reached 322 due to a falling response rate in Clinic 2 (as people were returning for repeat appointments). The results of the analysis revealed good

communalities and significant findings, which made theoretical sense. Tabachnick & Fidell (1996) argue that 'it is comforting to have at least 300 cases for factor analysis'. A more recent study by MacCallum et al., (1999) argues that strengths in one area can compensate for weakness in another area and suggest that when communalities are high (>0.6) the research should be in good shape even with a sample well below 100. In this study the average communality was above 0.6. Furthermore if data collection had continued it would have been necessary to find a further source of participants and it would have been difficult to have found a sample that would have been as well matched in terms of gender distribution and deprivation category scores.

SUMMARY AND RECOMMENDATIONS

In conclusion, it would appear that older adults and male lay people in particular have the greatest need for educational campaigns which are targeted specifically to inform and reduce the stigma associated with depression. In addition, primary care services need to be aware of the attitudinal hurdles that exist for both older adults and males in recognising and seeking help for depression. With this understanding GP's need to be extra-vigilant and sensitive in discussions regarding symptoms of depression. For these groups in the population, a change in attitude about depression is vital to make recognition and help-seeking for depression more possible. It is perhaps not surprising that older males are more likely to commit suicide than older females given their difficulty in seeking help for depression. Hopefully concerted efforts to inform attitudes about

depression and treatment for depression would help to reduce the suicide rate in older males.

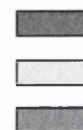
Table 1. Scores on questions according to the age of participant and age and gender of character in vignette (mean, standard deviation)

Question Number	Participants under 65 years				Participants over 65 years			
	David age 70 n=47	Mary age 70 n=45	David age 30 n=47	Mary age 30 n=49	David age 70 n= 37	Mary age 70 n=36	David age 30 n=31	Mary age 30 n=24
1	3.02 (1.26)	2.82 (1.29)	3.22 (1.31)	3.23 (1.36)	3.39 (1.20)	3.25 (1.16)	3.54 (1.23)	3.42 (1.28)
2	3.46 (1.12)	3.51 (1.12)	3.65 (0.95)	3.29 (0.87)	3.24 (0.97)	3.28 (0.91)	3.36 (1.02)	3.37 (1.01)
3	2.77 (1.11)	2.91 (1.24)	3.23 (1.11)	3.35 (1.10)	3.21 (0.93)	3.22 (1.10)	3.62 (1.07)	2.92 (1.28)
4	1.57 (0.80)	1.44 (0.75)	2.11 (1.32)	1.94 (1.05)	2.45 (1.46)	2.08 (1.13)	2.64 (1.29)	2.54 (1.53)
5	3.51 (0.95)	3.71 (0.92)	3.47 (1.43)	3.51 (1.19)	3.40 (1.09)	3.77 (0.93)	3.88 (1.01)	3.42 (1.01)
6	3.82 (1.01)	3.66 (1.21)	4.17 (0.87)	4.00 (0.89)	3.19 (1.13)	3.47 (0.88)	3.71 (1.10)	3.50 (1.14)
7	4.28 (0.86)	4.60 (0.62)	4.36 (0.79)	4.33 (0.80)	4.32 (0.78)	4.55 (0.65)	4.16 (0.78)	4.42 (0.65)
8	4.56 (0.69)	4.55 (0.79)	4.38 (0.74)	4.49 (0.74)	4.32 (0.92)	4.36 (0.99)	4.55 (0.67)	4.46 (0.72)
9	4.13 (1.02)	4.24 (0.86)	4.26 (0.82)	4.41 (0.84)	3.73 (1.12)	3.72 (1.14)	4.07 (1.08)	4.21 (0.98)
10	3.39 (1.08)	3.47 (1.01)	3.49 (1.08)	3.37 (1.22)	3.51 (0.93)	3.25 (1.08)	3.71 (0.90)	3.59 (1.18)
11	3.39 (1.29)	3.27 (1.38)	2.94 (1.29)	3.37 (1.29)	2.78 (1.29)	2.44 (1.44)	2.58 (1.56)	2.62 (1.64)
12	2.67 (1.37)	2.33 (1.36)	2.15 (1.30)	2.49 (1.37)	1.84 (1.28)	1.58 (1.10)	1.42 (0.81)	1.75 (1.33)

Factor 1 ‘familiarity with depression’ items 11 & 12

Factor 2 ‘recognition of depression as a mental illness’ items 6, 8, 9 & 10

Factor 3 ‘negative attitudes about depression’ items 1 & 4



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Chapter Five: Single Case Research Study

A parenting intervention to reduce challenging behaviours in a seven-year-old boy with learning disabilities and autistic features.

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University of Glasgow

Section of Psychological Medicine

Division of Community Based Sciences

Prepared in accordance with the guidelines for submission to

Submitted in partial fulfilment of the requirements for the degree of Doctorate in Clinical Psychology

**A parenting intervention to reduce challenging behaviours in a seven-year-old
boy with learning disabilities and autistic features.**

Running Head: Parenting intervention for challenging behaviour

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ABSTRACT

There is a strong research base for behaviourally based parenting interventions. This paper describes a parenting intervention to reduce challenging behaviours in a seven year old boy, with a learning disability and autistic features. The parenting intervention based on behavioural principles used video observation of the interactions between mother and child as a therapeutic tool and also a measure of effectiveness of the intervention. The results of the study demonstrated a statistically significant reduction in the child's challenging behaviour as reported by his mother and the video results indicated a reduction in three out of the four forms of challenging behaviour being studied. In addition, the reduction of challenging behaviour within the home setting was found to generalise to behaviour in public. However, one out of four, of the challenging behaviour increased following the parenting intervention, possible reasons for this are discussed and further clinical input described. Further research with other parents and children will be required to determine the effectiveness of the use of the video guided parenting intervention.

	Pages
Appendix 1: Small Scale Service Related Project	136-138
1.1 Guidelines for submission to the <i>Scottish Medical Journal</i>	
Appendix 2: Major Research Systematic Review	139-148
2.1 Guidelines for submission to <i>Journal of Mental Health</i>	
2.2 Quality criteria for cross-sectional studies	
2.3 Quality criteria for qualitative studies	
2.4 Quality criteria scoring method	
Appendix 3: Major Research Project Proposal	149-150
3.1 Course guidelines on preparation of Major Research Project Proposal	
Appendix 4: Major Research Project Paper	151-167
4.1 Letters confirming ethical approval for research project	
4.2 Information Form for Major Research Project	
4.3 Questionnaires for Major Research Project	

Appendix 1.1

Guidelines for contributions to *Scottish Medical Journal*

Scottish Medical Journal

incorporating

Edinburgh Medical Journal (founded 1805) and The Glasgow Medical Journal (founded 1828)

Guidance notes for contributors

The *Scottish Medical Journal* is published four times per year and is devoted to the publication of original investigations in all branches of medicine, review articles, historical subjects of medical interest, and clinical memoranda. Papers are accepted for publication on condition that they are offered to this journal alone and that they become the property of the *Scottish Medical Journal*.

Manuscripts should be submitted as:

Two copies on paper sent to:

Mr R Carachi, Editor, Scottish Medical Journal,

Department of Surgical Paediatrics, Royal Hospital for Sick Children,
Yorkhill, Glasgow G3 8SJ

PLUS EITHER:

A copy on a 3.5 inch PC formatted disk or a CD written in Word.

OR: as an email attachment in Word or Text to submit@smj.org.uk.

Papers should be written in clear concise English. Manuscripts should be typed, double spaced including title page, abstract, text, acknowledgements, references, figures, tables and legends. Number pages consecutively beginning with the title page.

The title page should include the name(s) and address(es) of all author(s). The corresponding author's email address should be included. Authors should include any declaration of any financial or commercial interest. Proofs will be sent to the corresponding author's address unless otherwise stated.

The second page should carry an abstract of not more than 250 words (Background and Aims, Methods and Results and Conclusion). Below the abstract include three to five key words or short phrases for indexing.

The description of methods and results should be in sufficient detail to allow repetition by others. Data should not be repeated unnecessarily in text, tables and figures. The discussion should simply repeat the results, but should present their interpretation against the background of existing knowledge.

References should be numbered consecutively in the order in which they appear in the text. Identify references in text, tables and legends by arabic numerals in superscript e.g. 3 or 2-4. Use the style of references adopted by Index Medicus. The titles of journals should be abbreviated and when there are more than six authors, it should be abbreviated to three authors followed by *et al.* The title of article, abbreviated name of journal, year, volume, first and last page numbers. 'Personal communications' and 'unpublished observations' (including information from manuscripts submitted but not yet accepted) should be so identified in parenthesis in the text and not included as references. Reference to books should include surname and initials of author(s), title of chapter, editor(s), title of book, place of publication, name of publisher, year, volume and page numbers.

Tables numbered in roman numerals should be submitted on separate sheets and should be designed to appear in either one column or across the whole page. Omit internal horizontal and vertical rules and do not submit tables as photographs.

Illustrations both half tone and line, should be referred to as 'Figures' and should be numbered in arabic numerals. They should be technically excellent and usually in the form of 5 x 7 glossy prints. Each figure and table should be accompanied on a separate sheet by a short legend as a heading with explanatory matter in footnotes. The name(s) of the author(s) should be written on the reverse side.

Case Reports

The authors should not include names, initials or hospital numbers of patients, which might lead to their recognition. A patient must not be recognisable in any photograph unless written consent has been obtained.

Guidelines for submission to *Journal of Mental Health*

Journal of Mental Health

*****Note to Authors:** please make sure your contact address information is clearly visible on the **outside** of all packages you are sending to Editors.***

Journal of Mental Health is an international journal adhering to the highest standards of anonymous, double-blind peer-review. The journal welcomes original contributions with relevance to mental health research from all parts of the world. Papers are accepted on the understanding that their contents have not previously been published or submitted elsewhere for publication in print or electronic form.

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Manuscripts should be sent to Executive Editor, Professor Til Wykes, Department of Psychology, Institute of Psychiatry, De Crespigny Park, London, SE5 8AF, United Kingdom. It is essential that authors pay attention to the guidelines to avoid unnecessary delays in the evaluation process.

To expedite assessment, three complete copies of each manuscript should be submitted along with an electronic version on disk. The names of authors should not be displayed on figures, tables or footnotes to facilitate blind reviewing.

All books for reviewing should be sent directly to **Martin Guha**, Book Reviews Editor, Information Services & Systems, Institute of Psychiatry, KCL, De Crespigny Park, PO Box 18, London, SE5 8AF.

Manuscripts should be typed on one side of paper, double-spaced (including references), with margins of at least 2.5cm (1 inch). Good quality printouts with a font size of 12 or 10 pt are required. The first page should show the full title of the paper, a short title not exceeding 45 characters (to be used as a running title at the head of each page), the full names and affiliations of authors and the address where the work was carried out. The corresponding author should be identified, giving full postal address, telephone, fax number and email address if available. To expedite blind reviewing, no other pages in the manuscript should identify the authors. All pages should be numbered.

Abstracts . The second page should also show the title, together with a structured abstract of no more than 200 words, using the following headings: Background, Aims, Method, Results, Conclusions, Declaration of interest. The declaration of interest should acknowledge all financial

support and any financial relationship that may pose a conflict of interest. Acknowledgement of individuals should be confined to those who contributed to the article's intellectual or technical content.

Keywords. Authors should include up to five key words with their article, selected from the American Psychological Association (APA) list of index descriptors, unless otherwise agreed with the editor.

Text . Follow this order when typing manuscripts: Title, Authors, Affiliations, Abstract, Key Words, Main text, Appendix, References, Figures, Tables. Footnotes should be avoided where possible. Manuscripts should not exceed 6,000 words unless previously agreed with the editor. Language should be in the style of the APA (see *Publication Manual of the American Psychological Association* , Fifth Edition, 2001).

Style and References . Manuscripts should be carefully prepared using the aforementioned *Publication Manual of the American Psychological Association* , and all references listed must be mentioned in the text. Within the text references should be indicated by the author's name and year of publication in parentheses, e.g. (Hodgson, 1992) or (Grey & Mathews 2000), or if there are more than two authors (Wykes *et al .*, 1997). Where several references are quoted consecutively, or within a single year, the order should be alphabetical within the text, e.g. (Craig, 1999; Mawson, 1992; Parry & Watts, 1989; Rachman, 1998). If more than one paper from the same author(s) a year are listed, the date should be followed by (a), (b), etc., e.g. (Marks, 1991a).

The reference list should begin on a separate page, in alphabetical order by author (showing the names of *all* authors), in the following standard forms, capitalisation and punctuation:

a) For journal articles (titles of journals should *not* be abbreviated):

Grey, S.J., Price, G. & Mathews, A. (2000). Reduction of anxiety during MR imaging: A controlled trial. *Magnetic Resonance Imaging*, 18 , 351–355.

b) For books:

Powell, T.J. & Enright, S.J. (1990) *Anxiety and Stress management* . London: Routledge

c) For chapters within multi-authored books:

Hodgson, R.J. & Rollnick, S. (1989) More fun less stress: How to survive in research. In G.Parry & F. Watts (Eds.), *A Handbook of Skills and Methods in Mental Health Research* (pp. 75–89). London:Lawrence Erlbaum.

Illustrations should *not* be inserted in the text. Three copies of each should be provided separately, numbered on the back with the figure number and the title of the article. All photographs, graphs and diagrams should be

referred to as 'Figures' and should be numbered consecutively in the text in Arabic numerals (e.g. Figure 3). The appropriate position of each illustration should be indicated in the text. A list of captions for the figures should be submitted on a separate page and should make interpretation possible without reference to the text. Captions should include keys to symbols. It would help ensure greater accuracy in the reproduction of figures if the values used to generate them were supplied.

Tables should be typed on separate sheets and their approximate position in the text should be indicated. Units should appear in parentheses in the column heading but not in the body of the table. Words and numerals should be repeated on successive lines; 'ditto' or 'do' should *not* be used.

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Appendix 2.2

Quality criteria for cross-sectional studies

(Adapted from SIGN guidelines for case-control studies)

- 1. Does the study address an appropriate and clearly focused question?*
- 2. Is the response rate to the survey adequate?*
- 3. Are the sampling procedures representative of overall population being studied?*
- 4. Are the groups of participants well matched?*
- 5. Are there sufficient patient numbers i.e. is the study powered enough to detect group differences?*
- 6. Are all relevant outcomes measured in a standard, valid and reliable way?*
- 7. Are the main potential confounders identified and taken into account adequately in the design and analysis?*

Quality Criteria for Qualitative Studies

Critical Appraisal Skills Programme, CASP collaboration for qualitative methodologies, Milton Keynes Primary Care Trust, 2002

Screening Questions

1 Was there a clear statement of the aims of the research? Yes No

Consider:

- what the goal of the research was
- why it is important
 - its relevance

2 Is a qualitative methodology appropriate? Yes No

Consider:

- if the research seeks to interpret or illuminate the actions and/or subjective experiences of research participants

Is it worth continuing?

Detailed questions

Appropriate research design

3 Was the research design appropriate to address the aims of the research? Write comments here

Consider:

- if the researcher has justified the research design (e.g. have they discussed how they decided which methods to use?)

Sampling

4 Was the recruitment strategy appropriate to the aims of the research? Write comments here

Consider:

- if the researcher has explained how the participants were selected
- if they explained why the participants they selected were the most appropriate to provide access to the type of knowledge sought by the study
- if there are any discussions around recruitment (e.g. why some people chose not to take part)

Data collection

5 Were the data collected in a way that addressed the research issue?

Write comments here

Consider:

- if the setting for data collection was justified
- if it is clear how data were collected (e.g. focus group, semi-structured interview etc)
- if the researcher has justified the methods chosen
- if the researcher has made the methods explicit (e.g. for interview method, is there an indication of how interviews were conducted, did they use a topic guide?)
- if methods were modified during the study. If so, has the researcher explained how and why?
- if the form of data is clear (e.g. tape recordings, video material, notes etc)
- if the researcher has discussed saturation of data

Reflexivity (research partnership relations/recognition of researcher bias)

6 Has the relationship between researcher and participants been adequately considered?

Write comments here

Consider whether it is clear:

- if the researcher critically examined their own role, potential bias and influence during:
 - formulation of research questions
 - data collection, including sample recruitment and choice of location
 - how the researcher responded to events during the study and whether they considered the implications of any changes in the research design

Ethical Issues

7 Have ethical issues been taken into consideration?

Write comments here

Consider:

- if there are sufficient details of how the research was explained to participants for the reader to assess whether ethical standards were maintained
- if the researcher has discussed issues raised by the study (e. g. issues around informed consent or confidentiality or how they have handled the effects of the study on the participants during

- and after the study)
- if approval has been sought from the ethics committee

Data Analysis

8 Was the data analysis sufficiently rigorous?

Write comments here

Consider:

- if there is an in-depth description of the analysis process
- if thematic analysis is used. If so, is it clear how the categories/themes were derived from the data?
- whether the researcher explains how the data presented were selected from the original sample to demonstrate the analysis process
- if sufficient data are presented to support the findings
- to what extent contradictory data are taken into account
- whether the researcher critically examined their own role, potential bias and influence during analysis and selection of data for presentation

Findings

9 Is there a clear statement of findings?

Write comments here

Consider:

- if the findings are explicit
- if there is adequate discussion of the evidence both for and against the researcher's arguments
- if the researcher has discussed the credibility of their findings (e.g. triangulation, respondent validation, more than one analyst.)
- if the findings are discussed in relation to the original research questions

Value of the research

10 How valuable is the research?

Write comments here

Consider:

- if the researcher discusses the contribution the study makes to existing knowledge or understanding (e.g. do they consider the findings in relation to current practice or policy, or relevant research-based literature?)
- if they identify new areas where research is necessary
- if the researchers have discussed whether or how the findings can be transferred to other

populations or considered other ways the research may be used

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Appendix 2.4

Quality Criteria Scoring Method

Based on the quality criteria described in appendices 2.2 and 2.3, studies are graded accordingly:

- 1a: Cross-Sectional Study meeting all or most of the criteria.
- 1b: Cross-Sectional Study meeting some of the criteria.
- 1c: Cross-Sectional Study meeting few or none of the criteria
- 2a: Qualitative Study meeting all or most of the criteria.
- 2b: Qualitative Study meeting some of the criteria.
- 2c: Qualitative Study meeting few or none of the criteria.

Appendix 3.1

Course guidelines on preparation of Major Research Project Proposal

Major Research Project Proposal

This can be written in the form of an application to a Local Research Ethics Committee and be presented, in full, in the final Research Portfolio. A copy of the letter(s) of ethical approval must also be included in the Research Portfolio. In circumstances where the completed project deviated from the original approved plan, the trainee must insert a clear explanation of these changes. Any further correspondence with the Local Research Ethics Committee, which relates to such changes, must also be appended. The Major Research Project Proposal should include the following headings:

Full title of project

Summary of project

Introduction

Aims and hypotheses

- Aims
- Hypotheses

Plan of investigation

- Participants
- Recruitment
- Measures
- Design and Procedures
- Settings and Equipment
- Power Calculation
- Data Analysis

Practical applications

Timescale

Ethical approval

References

Ms Hazel Connery
Trainee Clinical Psychologist
82 Dalmellington Road
Glasgow
G53 7GE

Date 13 May 2003
Your Ref
Our Ref AMcM/03/A/15
Direct Line 0141 211 3824
Fax 0141 211 3814
Email anne.mcmahon@gartnavel.gla.ac.uk

Dear Ms Connery

Research Protocol

Protocol Number: 03/A/15

Title: A survey of attitudes to depression in medical outpatients: a comparison of younger and older adults

The Greater Glasgow Primary Care NHS Trust Research Ethics Committee (Community & Mental Health) reviewed your application on 8 May 2003. The documents reviewed were as follows:

- ▶ Research Ethics Application dated 23 April 2003
- ▶ Letter from Medical Director dated 25 March 2003
- ▶ Survey Information Sheet no date or version number
- ▶ Consent Form no date or version number
- ▶ Questionnaire versions 1-4
- ▶ CV – Hazel Connery
- ▶ CV – Kathleen Mary Davidson
- ▶ Project Protocol dated March 2003

The members of the Committee present agreed there is no objection on ethical grounds to the proposed study. The Committee request however, that in this instance, no consent form is required, explicit consent is implied by the completion of the questionnaire. The Committee also note that there could be logistical problems with patients moving from one waiting area to another. I am, therefore, happy to give you the favourable opinion of the Committee on the understanding that you will follow the conditions set out below:

Conditions of approval

- ▶ You do not recruit any research subjects within a research site unless favourable opinion has been obtained for the Committee.
- ▶ You do not undertake this research in an NHS organisation until the relevant NHS management



approval has been obtained as set out in the Framework for Research Governance for Health and Community Care. In our Trust this responsibility has been delegated to the Research & Development Directorate.

- ▶ You do not deviate from, or make changes to, the protocol without prior written approval of the Committee, except where this is necessary to eliminate immediate hazards to research participants or when the change involves only logistical or administrative aspects of the research. In such cases the Committee should be informed within seven days of the implementation of the change.
- ▶ You complete and return the standard progress report form to the Committee one-year from the date of this letter and thereafter on an annual basis. This form should also be used to notify the Committee when your research is completed. In this case the form should be sent to the Committee within three months of completion of the research.
- ▶ If you decide to terminate this research prematurely you must send a report to the Committee within 15 days, indicating the reason for the early termination.
- ▶ You must advise the Committee of any unusual or unexpected results that raise questions about the safety of the research.

Any comments the Research Ethics Committee wished to make are contained in the attached Research Ethics Committee Response Form. The project must be started within three years of the date on this letter.

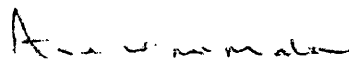
The Greater Glasgow Primary Care – Community & Mental Health Research Ethics Committee is fully compliant with the International Committee on Harmonisation/Good Clinical Practice (ICH) Guidelines for the Conduct of Trials Involving the Participation of Human Subjects as they relate to the responsibilities, composition, function, operations and records of an Independent Ethics Committee/Independent Review Board. To this end it undertakes to adhere as far as is consistent with its Constitution, to the relevant clauses of the ICH Harmonised Tripartite Guideline for Good Clinical Practice, adopted by the Commission of the European Union on 17 January 1997.

May I wish you every success with study -

Protocol Number: 03/A/15

Title: *A survey of attitudes to depression in medical outpatients: a comparison of younger and older adults*

Yours sincerely



Anne W McMahon
Research Ethics Coordinator

Enclosures

Research Ethics Committee Response Form

List of members present and members who submitted written comments

North Glasgow University Hospitals
NHS Trust

West Ethics Committee
Western Infirmary
Dumbarton Road
Glasgow, G11 6NT

Telephone: 0141 211 6238
Fax: 0141 211 1920



Date: 10th October 2003

Enquiries to Andrea Torrie
Extension As above
Direct Line As above

e-mail address:
Andrea.torrie@northglasgow.scot.nhs.uk

Ms Hazel Connery
Trainee Clinical Psychologist
Division of Community Based Sciences
Academic Centre
Gartnavel Royal Hospital
1055 Great Western Road
GLASGOW

Dear Ms Connery

PROJECT NO: 03/A/15 PCT
(Please quote on all correspondence)

PROJECT TITLE: Ms Hazel Connery – A survey of attitudes to depression in medical outpatients: a comparison of younger and older adults.

The West Local Research Ethics Committee reviewed the locality issues relating to the above LREC (Greater Glasgow Primary Care NHS Trust) approved application on 7th October 2003

The issues/documents reviewed were as follows:

- The suitability of the local researcher
- The appropriateness of the local research environment and facilities
- Any specific issues that may relate to this local community
- Letter dated 1st August 2003 from you
- Approval letter from Dr W G Anderson
- Approval letter from Greater Glasgow Primary Care NHS Trust dated 13th May 2003
- Research Protocol dated March 2003
- Questionnaire and Survey Information Sheet.

The LREC members consider the locality issues have been adequately addressed and the proposed research can be conducted within the boundary of this Health Board on the understanding that you will follow the conditions set out below:

Conditions:

- You do not recruit any research subjects unless favourable opinion has been obtained from the relevant LREC.
- You do not undertake this research in an NHS organisation until the relevant NHS management approval has been gained as set out in the Framework for Research Governance in Health and Social Care.
- You do not deviate from, or make changes to the protocol without prior written approval of the Research Ethics Committee except where this is necessary to eliminate immediate hazards to research participants or when the change involves only logistical or administrative aspects of the research. In such cases the REC should be informed within seven days of the implementation of the change.
- You should complete and return the standard progress report form to the appropriate REC one year from the date of this letter and thereafter on an annual basis. This form should also be used to notify the REC when your research is complete and in this case should be sent to this REC within three months of completion.
- If you decide to terminate your research prematurely, you should send a report to the REC within 15 days, indicating the reason for the early termination.
- You should advise the sponsor of any unusual or unexpected results that raise questions about the safety of patients taking part in the research.

Yours sincerely,



Andrea H Torrie

ADMINISTRATOR – WEST ETHICS COMMITTEE

Survey Information Sheet

When you are waiting for your appointment, I will invite you (and any visitors) to complete a brief questionnaire.

What is the survey about?

I am conducting a research study into people's views on a fictional character described in a very short story. I am interested in what you think is wrong, if anything, with the person described in the story and what you think would be the best way to help them.

The overall aim of this survey is to guide treatment services to best help people who have difficulties similar to those described in the story. If you would like any more information about this survey, I would be happy to discuss it further with you.

The survey is nothing to do with your visit to the consultant or nurse in the out-patient department.

What will I have to do?

I would be very appreciative if you would complete this short questionnaire, it should take no more than 5 minutes to complete.

Who will have access to the information?

If you do agree to complete the questionnaire, your responses will be kept confidential – that is that no-one will be able to identify that it was you that completed the questionnaire. I do not need to know your name or date of birth. However, I will ask for your age grouping, and your postcode.

Hazel Connery

Appendix 4.2 Questionnaires for Major Research Project

Version One:

- a) David is 30 years of age
- b) Mary is 30 years of age

Version Two:

- a) David is 70 years of age
- b) Mary is 70 years of age

QUESTIONNAIRE

Please circle the details below that apply to you.

AGE: 18-30 31-45 46-64 65-75 Over 75
years

GENDER: Male Female

ARE YOU THE PATIENT OR VISITOR: Patient Visitor

Please write your postcode in the space below:

Please read the text below and answer the questions below and over the page by circling your response.

David is 30 years of age. He has been feeling unusually sad and empty for the last few weeks. He is lacking in energy and often feels worthless. David has a growing dissatisfaction with his life and is afraid that something bad is going to happen to him. He has dropped many of his activities and interests and prefers to stay at home rather than going out and doing new things. This has come to the attention of his neighbour, who is concerned about not seeing David about as often.

How much do you agree that:

1. David should pull himself together

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
-----------	-------------	------------	---------------	------------

2. David is having the kind of problems that all of us have at times

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
-----------	-------------	------------	---------------	------------

3. David would be difficult to talk to

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
-----------	-------------	------------	---------------	------------

4. David has only himself to blame

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
-----------	-------------	------------	---------------	------------

5. David may be physically ill

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
-----------	-------------	------------	---------------	------------

6. David might be suffering from a mental illness

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
-----------	-------------	------------	---------------	------------

7. David would benefit from talking to a friend

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
-----------	-------------	------------	---------------	------------

8. David would benefit from talking to his own doctor (i.e. his GP)

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
-----------	-------------	------------	---------------	------------

9. David would benefit from talking to a mental health professional

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
-----------	-------------	------------	---------------	------------

10. David would benefit from medication

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
-----------	-------------	------------	---------------	------------

11. Do you know anyone who has had similar problems to David?

Exactly the same	Almost the same	Sort of the same	Not very similar	Not at all
------------------	-----------------	------------------	------------------	------------

12. Have you ever had problems similar to David?

Exactly the same	Almost the same	Sort of the same	Not very similar	Not at all
------------------	-----------------	------------------	------------------	------------

QUESTIONNAIRE

Please circle the details below that apply to you.

AGE: 18-30 31-45 46-64 65-75 Over 75
years

GENDER: Male Female

ARE YOU THE PATIENT OR VISITOR: Patient Visitor

Please write your postcode in the space below:

Please read the text below and answer the questions below and over the page by circling your response.

Mary is 30 years of age. She has been feeling unusually sad and empty for the last few weeks. She is lacking in energy and often feels worthless. Mary has a growing dissatisfaction with her life and is afraid that something bad is going to happen to her. She has dropped many of her activities and interests and prefers to stay at home rather than going out and doing new things. This has come to the attention of her neighbour, who is concerned about not seeing Mary about as often.

How much do you agree that:

1. Mary should pull herself together

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
-----------	-------------	------------	---------------	------------

2. Mary is having the kind of problems that all of us have at times

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
-----------	-------------	------------	---------------	------------

3. Mary would be difficult to talk to

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
-----------	-------------	------------	---------------	------------

4. Mary has only herself to blame

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
-----------	-------------	------------	---------------	------------

5. Mary may be physically ill

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
-----------	-------------	------------	---------------	------------

6. Mary might be suffering from a mental illness

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
-----------	-------------	------------	---------------	------------

7. Mary would benefit from talking to a friend

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
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8. Mary would benefit from talking to her own doctor (i.e. his GP)

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
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9. Mary would benefit from talking to a mental health professional

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
-----------	-------------	------------	---------------	------------

10. Mary would benefit from medication

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
-----------	-------------	------------	---------------	------------

11. Do you know anyone who has had similar problems to Mary?

Exactly the same	Almost the same	Sort of the same	Not very similar	Not at all
------------------	-----------------	------------------	------------------	------------

12. Have you ever had problems similar to Mary?

Exactly the same	Almost the same	Sort of the same	Not very similar	Not at all
------------------	-----------------	------------------	------------------	------------

QUESTIONNAIRE

Please circle the details below that apply to you.

AGE: 18-30 31-45 46-64 65-75 Over 75
years

GENDER: Male Female

ARE YOU THE PATIENT OR VISITOR: Patient Visitor

Please write your postcode in the space below:

Please read the text below and answer the questions below and
over the page by circling your response.

David is 70 years of age. He has been feeling unusually sad and empty for the last few weeks. He is lacking in energy and often feels worthless. David has a growing dissatisfaction with his life and is afraid that something bad is going to happen to him. He has dropped many of his activities and interests and prefers to stay at home rather than going out and doing new things. This has come to the attention of his neighbour, who is concerned about not seeing David about as often.

How much do you agree that:

1. David should pull himself together

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
-----------	-------------	------------	---------------	------------

2. David is having the kind of problems that all of us have at times

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
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3. David would be difficult to talk to

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
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4. David has only himself to blame

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
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5. David may be physically ill

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
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6. David might be suffering from a mental illness

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
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7. David would benefit from talking to a friend

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8. David would benefit from talking to his own doctor (i.e. his GP)

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9. David would benefit from talking to a mental health professional

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
-----------	-------------	------------	---------------	------------

10. David would benefit from medication

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
-----------	-------------	------------	---------------	------------

11. Do you know anyone who has had similar problems to David?

Exactly the same	Almost the same	Sort of the same	Not very similar	Not at all
------------------	-----------------	------------------	------------------	------------

12. Have you ever had problems similar to David?

Exactly the same	Almost the same	Sort of the same	Not very similar	Not at all
------------------	-----------------	------------------	------------------	------------

QUESTIONNAIRE

Please circle the details below that apply to you.

AGE: 18-30 31-45 46-64 65-75 Over 75
years

GENDER: Male Female

ARE YOU THE PATIENT OR VISITOR: Patient Visitor

Please write your postcode in the space below:

Please read the text below and answer the questions below and over the page by circling your response.

Mary is 70 years of age. She has been feeling unusually sad and empty for the last few weeks. She is lacking in energy and often feels worthless. Mary has a growing dissatisfaction with her life and is afraid that something bad is going to happen to her. She has dropped many of her activities and interests and prefers to stay at home rather than going out and doing new things. This has come to the attention of her neighbour, who is concerned about not seeing Mary about as often.

How much do you agree that:

1. Mary should pull herself together

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
-----------	-------------	------------	---------------	------------

2. Mary is having the kind of problems that all of us have at times

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
-----------	-------------	------------	---------------	------------

3. Mary would be difficult to talk to

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
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4. Mary has only herself to blame

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
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5. Mary may be physically ill

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
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6. Mary might be suffering from a mental illness

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
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7. Mary would benefit from talking to a friend

Very Much	Quite a lot	Moderately	Not Very Much	Not at all
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8. Mary would benefit from talking to her own doctor (i.e. his GP)

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9. Mary would benefit from talking to a mental health professional

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10. Mary would benefit from medication

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12. Have you ever had problems similar to Mary?

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